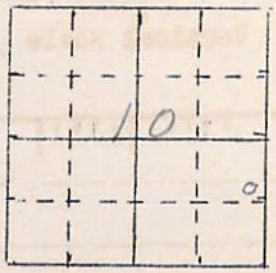
IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

W-1824



RECORD OF WELL

Location:

(N E)
Town: Ossian (S W); County Winneshiek
E.
SE¼ NE¼ SE¼ sec. 10 T. 96 N., R. 8 W. Military Twp.

Well name and number Ossian Town Well #2

Owner Ossian Address

Tenant Address

Contractor Varner Address Dubuque

Drillers Bloyer, Ralph & Ziegler

Drilling dates January 1944 - May 1944

Well data:

Elevations: Drilling curb 1264 feet; Land surface 1264 approx feet

Determined by WEH

Topographic position ridge

Total depth: Reported 981 feet; Measured feet

Drilling method cable tool

Hole and casing data 19" hole 0-227', 12" hole 227'-543', 10" hole 543'-984'
(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.)
52' of 20" O.D. casing from 0-52', 229' of 12" I.D. casing 0-229'
118' of 10" liner 425-543'

Original depth to water 380 ft. ~~above~~ below Date May 29, 1944

Original elevation of water level 884 ft.; Source of data Altfillisch

Sources of water: Principal Jordan; Others

Production data: Date May 29, 1944

Static depth to water 380'; Measuring point _____

Pumping level 392' at 200 g.p.m.

Specific capacity _____ g.p.m. per ft. drawdown; Temperature _____ °F.

Pump data: Type pump _____: Column: Dia. _____ Length 420

Cylinder or bowls: Dia. _____ Length _____; Suction pipe _____

Power _____; Airline 420

Estimated rate of production: _____ g.p.m. for _____ hrs. a day

Use of water City supply

WATER ANALYSES (in parts per million)

Date sampled	May 5, 1944			
Sampled by	R.B. McAllister			
Total solids	645			
Insoluble matter	29.0			
Alkalinity (Meo)	334.0			
Alkalinity (Phn)	0.0			
pH	7.1			
$Fe_2O_3+Mn_2O_3+Al_2O_3$	13.5			
Alkali as sodium	5.1			
Calcium	105.1			
Magnesium	44.8			
Iron (unfiltered)	9.0			
Manganese	0.00			
Nitrate	0.09			
Fluoride	1.1			
Chloride	4.7			
Sulphate	107.6			
Bicarbonate	407.5			
Hardness (ppm)	463			
Hardness (gpg)	27.1			

Remarks Sample taken from St. Peter while still drilling - boiler sample

Laboratory data: Sample storage location _____

Sample range 55-981 No. spls. 197 No. dupls & cond. 197 good

Spls. prepared by Knight & Harris Washed range _____ by ditto

Driller's log and cond. _____

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

Microscopic study ✓ HGH&SEH 55-981 strip log ✓ Hershey & Harris

Gen. log _____ Correl. by Hershey & Harris

Varner Well Drilling Company

INCORPORATED

905 Dubuque Bldg. Telephone 3691

DUBUQUE, IOWA,

RECORD * WELL CAPACITY TEST

JOB City of Ossian, Iowa Well LOCATION Ossian, Iowa DATE May 29, 1944

PUMP SETTING 420 FT. AIRLINE 420 FT. STATIC HEAD 380 FT.

Time	Inches Tube	G.P.M.	Airline	Drawdown	Pumping Level	Temp.	Remarks
3.00 PM	43	219	25	15	395		Start, valve open
3.30	43	219	28	12	393		
3.45	43	219	28	12	393		Shut down for adjustment
4.00			41				Start
4.10	42						Drag on bottom
4.15	42		28				Off, raised 6"
4.20			41				Start, adjusting
5.30	40	210	28	12	393		Start test
6.00	40	210	29	12	393		
6.30	40	210	29	12	393		
7.00	40	210	29	12	393		
7.30	41	212.5	29	12	393		
8.00	41	212.5	29	12	393		
8.30	41	212.5	29	12	393		
9.00	41	212.5	29	12	393		
9.30	41	212.5	29	12	393		
10.00	41	212.5	29	12	393		
10.30	41	212.5	29	12	393		
11.00	41	212.5	29	12	393		
11.30	41	212.5	28	12	393		Air guage drop to 28 ft.
12.00	41	212.5	28	12	393		
12.30 AM	41	212.5	28	12	393		
1.00	41	212.5	28	12	393		
1.30	41	212.5	27	13	392		
2.00	41	212.5	27	13	392		
2.30	41	212.5	27	13	392		
3.00	41	212.5	27	13	392		
3.30	41	212.5	27	13	392		
4.00	41	212.5	27	13	392		
4.30	41	212.5	27	13	392		
5.00	42	216	27	13	392		Water guage gain 1"
5.30	42	216	27	13	392		
6.00	42	216	27	13	392		
6.30	42	216	27	13	392		
7.00	42	216	27	13	392		
8.00	42	216	27	13	392		
8.30	42	216	27	13	392		
9.00	42 1/16	218	27	13	392		
9.30	42 1/16	218	27	13	392	50°	
10.00	42 1/16	218	27	13	392		
10.30	42 1/16	218	27	13	392		
11.00	42 1/16	218	27	13	392		
11.30	42 1/16	218	27	13	392		

12.00 M.	42 1/2	218	27	13	392	
12.30 PM	42 1/2	218	27	13	392	
1.00	42 1/2	218	27	13	392	50°
1.30	42 1/2	218	27	13	392	
2.00	42 1/2	218	27	12	392	
2.30	42 1/2	218	27	12	392	
3.00	42 1/2	218	27	12	392	
3.30	43	219	27	12	392	
4.00	43	219	27	12	392	
4.30	43	219	27	12	392	
5.00	43	219	27	12	392	
5.30	43	219	27	12	392	

Varner Well Drilling Company

INCORPORATED

905 Dubuque Bldg. Telephone 3691

DUBUQUE, IOWA,

Re: City of Ossian Well
Ossian, Iowa

Date Started February 19, 1944 Date Completed May 31, 1944

Depth 984 feet

Diameters 19" hole from surface to 227 ft., 12" hole from 227 ft. to 543 ft., 10" hole from 543 ft. to 984 ft.

Casings 52 ft. of 20" O.D. casing from surface, 229 ft. of 12" I.D. casing from surface, cement grouted, 118 ft. of 10" liner from 425 ft. to 543 ft.

STRATA RECORD DEPTH:

From	To	Thickness	Description of Beds
Top	13'	13'	Yellow Clay
13'	48'	35'	Yellow clay and sand, gravel
48'	50'	2'	Hard brown and white lime
50'	52'	2'	Hard sharp red rock
52'	69'	17'	Hard brown rock
69'	74'	5'	Brown rock and shale
74'	92'	18'	Gray shale streaked with rock
92'	103'	11'	Gray rock and shale
103'	133'	30'	Gray rock
133'	140'	7'	Rock and shale
140'	145'	5'	Gray shale and some rock
145'	153'	8'	Gray rock
153'	157'	4'	Gray rock & shale
157'	165'	8'	Gray shale
165'	175'	10'	Shale & Lime
175'	210'	35'	Gray shale
210'	214'	4'	Brown shale, hard
214'	218'	4'	Gray shale and fine rock
218'	227'	9'	Gray rock
227'	232'	5'	Brown lime, hard
232'	270'	38'	Gray lime
270'	276'	6'	Brown and Gray Lime
276'	327'	51'	Gray Lime
327'	333'	6'	Course gray rock
333'	366'	33'	Gray rock
366'	373'	7'	Hard dark gray rock
373'	379'	6'	Gray rock
379'	384'	5'	Light gray rock
384'	395'	11'	Blue and gray rock
395'	405'	10'	Gray rock
405'	446'	41'	Gray lime

446'	448'	2'	Dark gray rock & shale
448'	470'	22'	Gray rock and shale
470'	475'	5'	Dark Gray rock
475'	480'	5'	Streaks of rock and shale
480'	483'	3'	Soft gray shale
483'	488'	5'	Shale
488'	490'	2'	Shale and rock
490'	497'	7'	Gray rock
497'	503'	6'	Hard brown lime
503'	505'	2'	Hard gray lime
505'	511'	6'	Gray lime
511'	516'	5'	Gray rock
516'	521'	5'	Rock & Shale
521'	527'	6'	Green shale
527'	531'	4'	Green shale & Sand
531'	584'	53'	Sandstone
584'	658'	74'	Dolomite
658'	673'	15'	Dolomite & Shale
673'	689'	16'	Dolomite
689'	695'	6'	Blue shale and sand
695'	700'	5'	Gray Sandstone
700'	703'	3'	Hard gray sandstone
703'	704'	1'	Hard sandstone
704'	705'	1'	Gray dolomite and sand
705'	718'	13'	Gray rock
718'	750'	32'	Dolomite
750'	773'	23'	Gray rock
773'	776	3'	Hard white rock
776'	784'	8'	Hard blue rock
784'	820'	36'	Gray rock
820'	825'	5'	Gray rock & shale
825'	830'	5'	Gray rock
830'	835'	5'	Gray rock & shale
835'	856'	21'	Gray rock
856'	889'	33'	White rock
889'	920'	31'	Brown rock
920'	926'	6'	Rock & sand, sandstone at 924'
926'	950'	24'	Gray sandstone
950'	952'	2'	Sand & shale
952'	960'	8'	Gray sandstone
960'	970'	10'	Gray sand
970'	982'	12'	Gray sandstone
982'	984'	2'	Sand and green shale

Static Water Levels:

Top	to	443'	0'
443'	to	495'	425'
495'	to	502'	400'
502'	to	511'	410'
511'	to	527'	375'
527'	to	555'	390'
555'	to	579'	410'
579'	to	625'	390'
625'	to	637'	418'
637'	to	655'	394'
655'	to	704'	390'
704'	to	709'	385'
709'	to	750'	390'
750'	to	765'	385'
765'	to	794'	390'
794'	to	950'	385'
950'	to	968'	375'
968'	to	984'	380'

Sheet No. 1 Name of Well Ossian Town Survey No. W-1824

Location Date Drilled 4/12/49 Analyst S.E.H.Jr.

2 00

10

20

30

40

50

60

70

Ls, v. lt crm w. H bff dol o rh dolo 10% cal xtls
brn arg prtings fos frags cri donut eri

80

Ls ditto dolo rh brn arg ~~dkng~~ prtings cal
fos cri

Ls ditto ⟷ dolo 15% fn med cal veinlets

90

Ls ⟷ Dolo 35%
highly fos frag

Ls ⟷ Dolo fn 30%
crm to bff

00

Ls crm w. dolo rh, blk spots ⟷ Dolo 15%
cal
donut cri

Sheet No. 2 Name of Well Ossian Town Survey No. W-1824

Location ..... Date Drilled ..... Analyst SEM

4/12/94

300 Ls, ditto ⟷ dolo fn, lt bff 35% clear cal
blk spots
fos

Ls v. lt bff ⟷ dolo 40
fos bryo

10 Cht, 5 pale gr, hachly, op trip
Ls ditto ⟷ dolo 40 to pale bff, subcond cal
v. fos
dolo rh blk spots
Ls lt bff drb ⟷ Dolo fn xtln
Cht trip 1% slickensides

20 Ls ⟷ dolo
Cht, v/lt bff, blk sphs rough
Dolo fn w. Ls matrix
Cht, 5-10: pale gr blk muds, conch, op, some dcstlc

30 Dolo ditto bff drb w. gr spots
Cht ditto - 5%

Dolo ditto
Cht - 5%

40 Ls, crm bff some dolo rh ⟷ dolo 5% marc
Cht 5% v/lt drb gr, op conch dnse calcite veins

Ls, crm v. fn some dolo rh cal qtz xtl 3 sphalerite marc
coral cri lrge & small

50 Ls, crm to v. lt brn mealy marc stringers & sphs
v fos frags cal vein material
marc sphs

Ls ditto
cht tr

60 Ls, lt brn v. fn mealy some dolo cr.
fos gr fos frags

Ls ditto to sublith dolo rh marc sphs
gr fos

70 Ls ditto marc sphs

Ls ditto v/lt brn & crm dolo rh marc sphs
some gr

marc

80 Ls, crm, v. fn ⟷ dolo lt drb bff marc
fos

Ls ditto
Ls, lt gr, v. silty py sphs 75%
Cht, lt crm, conch op some hachly silty trip tr

90 Ls, lt drb crm, fn dolo rh v. fos

Chal tr emb, wat gr, transl
Ls, ditto lt gr drb
v. fos cri, brach

400

Sheet No. 3 Name of Well Ossian Town Survey No. W-1824.

Location ..... Date Drilled ..... Analyst SEM

4 00

Ls ditto ⟷ dolo 50%

Ls, v. lt brn, bff dolo rh ⟷ dolo 15%

10

Ls ditto

Ls, crm to v. lt brn, pbrn arg prtings gr fos sheen

20

Ls ditto cal veinlets almost no dolomitization
sh, drb brn, fos, calc 15%

Ls, ditto blk pyrc sphs coral
cht's v. lt drb, op, conch to rough marc

30

Ls ditto brn arg prtings brach bryo cal
Cht 10% lt gr to tan brn w. wh sphs ditto marc

Ls ditto w. prtings py sphs cal
cht ditto 10% marc

40

Ls ditto w. gr fo spots bryo brach
Cht tr marc

sh gr grn v. calc ⟷ 25% Ls gr drb, v. fn dnse arg
fos gr coral, cri, brach, bryo

50

Ls gr grn, v. fos, frag, highly arg ⟷ sh 15%
fos gr

Ls, frag, fos, gr grn, arg ⟷ sh 20% marc
gr fos bryo, cri, brach, coral

60

Ls ditto ⟷ sh gr grn 15%
gr & blk fos frags

Ls ditto ⟷ sh 20%

5 sided cri highly fos

70

Ls, lt crm brn, v. fn w. v. ab'dt blk fos frags sl/ly arg

sh, grn, v. calc
Ls as above 20% marc

80

sh grn v. highly fos lam ost
Ls 5% molds in sh marc

Ls, lt grish bff, v. fn
Ls ditto 30% marc-S?
sh, dk brn, lam, dolc 5

90

Ls, v. lt gr v. fn mealy ab'dt gr fos
marc

Ls v. lt brn, v. fn mealy plk fos
sh 5%

5/13/44 5 00

Sheet No..... Name of Well.....Ossian..... Survey No...W-1824

Location ..... Date Drilled..... Analyst.....SEHg.....

May 16, 1944

500

Ls, v.lt bffish gr, v.fn some gr fos cri trgrn sh
sd loose fn ~~a~~ctor tr

Ls ditto some sublith some frag

10

Ls ditto fos cri, brach cal
dolo lt bff, fn xtln dnse grn sh tr

Ls, lt brn, v.fn to sublith w. med sd & blk phos frags emb marc -5%
sh, med brn, fis, blk spks 5
sh, grn, fis, nonc 20 sd a toc crsdy fr

20

sh grnish brn, highly dolc, roughly lam, ~~highlighted~~
15 Ls pale gr, fn pyrc, phos frags, highly sdy fn to v.crse fr & crsely rex
ss, wh, fn to med C to R very fnly fr highlighted
sh grn waxy, fis 35%

30

ss med ditto

ss ditto +1 0%, 1-½ 5, ½-¼ 60, ¼-⅛ 30, ⅛-1/16 5% slt tr
C to R even v. fn well rded f fr

40

distinctly fner

ss ditto
dolo, drb, fn gran 5%

50

ss ditto
dolo 15% +1 0, 1-½ 1%, ½-¼ 45%, ¼-⅛ 30%, ⅛-1/16 25% slt tr

ss ditto
sh grn fis 5%

60

ss ditto

ss ditto cemented by dolo

70

1-½ 2 ½-¼ 50 ¼-⅛ 30 ⅛-1/16 18 slt tr
cem

ss ditto cem
~~+1 tr 1-½ 12% ½-¼ 50 ¼-⅛ 30 ⅛-1/16 19% slt tr~~

80

ss ditto Dolo tr
+1 tr, 1-½ 12, ½-¼ 50 ¼-⅛ 30 ⅛-1/16 19% slt tr
Dolo, lt yel gr, fn xtln some sd emb tr marc
cht wh & pale gr. conch, opt to transl -5% S = 60

90

Dolo lt bff highly calcitic & sdy (5 bars)

~~mu~~ 50% sd loose ~~ss prob cave~~
Dolo v.lt crm gr, v. fn xtln dnse
25% ss cave

600

Sheet No..... Name of Well.....Ossian..... Survey No.....WV-1824

Location ..... Date Drilled..... Analyst.....S.E.Hig...

5/17

600

Dolo as above 25%
ss, fn well rdcd & tr

Dolo v/lt crm gr, fn xtln gran w. fn to crse sd emb
sd is more closely fr 1 hyp of P type 3 bars
2.5% loose

10

Dolo ditto gran pyrc sdy some sd fnly rex py

Dolo lt crm bff, fn med to med; v. sdy & pyrc
some gr. crse cal rh 5%
sh, grn lam

20

Dolo v.lt gr yel, fn gran xtln cal rh

Dolo crm yel, v. fn xtln cht wh, 5% porc, some trip
ss fn to crse cemented by wh cal 40 py tr

30

Dolo lt yel bff & pnk, fn med to med xtln, v. sltly sdy
cht, wh, some wtrose, porc 5% cal

Dolo bff fn med to med sdy
sd fr, c to r brach tr grn sh

40

Dolo lt crm bff & pnk, fn xtln v. sltly sdy
sh 15% grn, fis, nonc cht wh porc tr 10% loose sd

Dolo sltly drker bff, sltly calcitic tan rded masses
sh -5%

50

Dolo, v.lt bff ish yel, fn xtln sltly calcitic w. wh cal emb
looks por some loose sd 5%

Dolo, lt bff ish yel, calcitic vv. sdy fn
ss, wh, fn well cemented by cal 40 some coated w. wh cht

60

Dolo ditto v. sdy
ss ditto 20% sd a to c, fnly rex ditto

Dolo ditto 5 bars chal, transl,
ss 10% cht wh trip -5%

70

cht wh, irreg ool - 5
sh, grn lb
ss, fn to med A to c Dolo ditto 10
ss, fn to med w. cal cement
cht wat tr +
sh grn, fis nonc 35

80

ss ditto cal cement v. fn to v. crse
sh ditto cht wh ap, conch some add w. sd center
Dolo, pnkish crm, v. fn dnse
cht tr ool

90

ss ditto cal cem 25% sh tr
Sh grn, fis, nonc, py spks
ss fn to crse A to C fr 20
1-½: 5 ½-¼ 57 ¼-⅛ 30 ⅛-⅙ 8 sh tr
ss med & crse well fr fnly rex C
fner A to a some fr

700

Sheet No..... Name of Well..... Ossian ..... Survey No.....W-1024

Location ..... Date Drilled..... Analyst.....SEM

700

Dolo pale gr fn med mot w. lt gr chal cht, transl conch cht shows ool struct. emb (5 bars tr glauc marc

Dolo, lt gr, fn med to med ditto cht (3 bars)

cht, lt gr to wh, op conch cal rh

10

Dolo ~~pale~~ lt yel gr, fn med loose sd 5% f

Cht wh mot lt gr 5% same chal tr ool cal

Dolo lt drbish gy fn med xtln dnse cht tr glauc

Cht wh to lt ~~gr~~ gr conch sub transl 5-10% sd loose

20

Dolo v. lt yel fn med

cht ditto 20% chal same some bnded & qtzose cal 5%

Dolo yel gr, fn med 10

Cht 40% lt gr, conch, op to transl some trip loose sd

30

Dolo lt yel gr med por

sd loose 5+

Dolo ditto some cal

sd cave

40

Dolo ditto lt gr med cal

Dolo ditto lt yel gr ditto

Sh, grn, fis, blk spks 30 cht - 5% cal

50

Dolo ditto calcitic some trip PY

Cht wh & v. lt gr, op to transl same chal ool cal

Dolo ditto calcitic xtln gran somewhat poor cal

cht ditto 5% PY

60

Dolo ditto tr glauc

cht ditto 5% cal

Dolo yel gr med cal

cht ditto 5%

70

cht, chal, transl, wat, conch slty dolc tr ool

dolo, lt gr fn 10%

Dolo 35% lt yel gr fn to fn med PY & marc

Dolo 35% lt med gr, fn xtln-itic some ool 5-10%

Cht ~~10%~~ wh, of same, Qtzitic

80

Dolo, lt yel gr, med xtln sh grn - 5%

Dolo gr fn to f agg 10%

cht 5% sd fn to med fr %

Dolo yel bff fn med xtln tr glauc cal

cht tr grn sh - %

90

Dolo lt yel gr fn med to med cal

cht lt gr mot transl bnded 5-10% tr sd

Dolo ditto more bff ish cal

cht ditto to wh - 5% sd - 5%

800

Sheet No..... Name of Well..... Ossian ..... Survey No.... W-1824

Location ..... Date Drilled..... Analyst..... S.E.H.

Unwashed

8 00 –

Dolo lt bff, fn xtln, ab'd't dolo ool por
cht wh & lt gr, conch, op - 5%

Dolo gr bff, fn med xtlo
ch ditto - 5%

10

Dolo ditto sprkling
cht - 5%

Dolo ditto
cht, wh to v. lt gr, mot, conch, op 5% cal

20

Dolo lt bff fish gr med xtln sprkling
Cht ditto 5% cal
sh gr grn

Dolo ditto
cht wh to v. lt gr, op, conch, some bnded

30

Dolo ditto some lt gr, v. fn, dnse
cht - 5%

Dolo lt yel, fn, gran cal
Cht tr
sh tr grn

40

Dolo ditto cal
tr cht

dol. ditto

50

Dolo lt yel, fn to fn med, xtlo

Dolo, lt yel, fn xtln - gran sprkling
sd loose, fn to med, c to r fr

60

Dolo ditto tr sd emb
sh, grn, fis, none

Dolo lt yel bff fn med

70

Dolo lt yel fn med xtln sprkling
sd loose fn to med, fr c to r - 5%

Dolo ditto
tr cht sd - 5%

80

Dolo yel fn to fn med somewhat por
sd ditto tr tr py cal

Dolo ditto sd tr
sh lt grn tr

90

Dolo ditto grn glauc sphs sprkling
sd - 5% sh tr ditto

Dolo ditto cal
sh tr sd - 5%

9 00

Sheet No..... Name of Well..... Ossian ..... Survey No.... W-1824

Location ..... Date Drilled..... May 19, 1944 Analyst..... SEM

900

Dolo lt bff, fn med highly sdy marc -5
sd fn to med, c to r

Dolo lt grish bff v. sdy cal
fr, c to R marc 2

10

Dolo yel gr & bff fn med to med cal
sdy mostly loose 15%

Dolo lt sltly bffish gr, med xtln sdy
sh, grn -5% nonc
sd med 3 bars c, wh fnly fr ss 15% cemented

20

Dolo lt bff, med xtln sdy (4 bars)
driller 24 ss fn to med loose 40% some sltly rex
1-½ 10 ½-¼ 50 ¼-⅛ 30 ⅛-1/16 10 slt tr

Dolo ditto 15%

30

ss v. similar to st P med + crse less highlighted, v. fn & fn slightly more ang; Med+crse, fnly rex
ss sltly crser rather tightly cemented by cal

ss ditto

40

ss ditto wh
+1 +½ 1-½ 35 ½-¼ 45 ¼-⅛ 15 ⅛-1/16 5 sl sl tr

ss ditto wh highly cemented by cal

50

ss ditto but much mostly crse & med

ss ditto less highlighted than st P
(2-1)
+1 5-10%; 1-½ 58; ½-¼ 35; ¼-⅛ 1% ⅛-1/16 sl tr slt v. slt tr

60

ss ditto apparently not so well cemented

ss ditto +1 5%, 1-½ 55 ½-¼ 44 ¼-⅛ 1% ⅛-1/16 tr slt tr
some cemented by cal

70

ss ditto

ss ditto but consid fner much hrd & well cemented
v. sltly
sh lt grn calc, fis, splintery some py cement

80

Sh, grn, waxy, none, abd't brn fos frags pelec, brach; cemented ss ditto
-81

90

00

Sheet No. 1 Name of Well OSSIAN Town Well No. 2 Survey No. W.1825

Location SE NE BE Sec 10, T96N, R18W Date Drilled Feb 1944 Analyst R.H. R.W. RUSH

400	calcite xl dark gray traces	LS - Light gr. 50%, Fine, BLACK SPECS,
	Bryozoa?	Dolo - medium grain, xline, dark gray,
		LS - Light gr, 45% Fine, BLACK SPECS
		Pyrite - Traces, Dark gray material Traces
		Dolo - 55%, medium, xline, dark gray
10	Pyrite Trace	LS - 50% light grey, Fine, DULL,
		Dolo - 50% Dark gray, medium xline, waxy
		LS - 90% Light brown, DULL, Dense, Hard, BLACK SPECS
		Calcite xls.
		Dolo - 10%, fine, xline, Dark gray
20		LS - 90%, light brown, Fine,
		calcite veins, xls.
		Dolo - 10%, Dark gray, medium, xline
	Pyrite Trace	LS - Light to light Brown, Fine, DULL,
		chert - Fragments, DULL,
		calcite veins,
30	Pyrite Trace	LS - 60% - Light Brown, Fine, DULL,
		Dolo - 20%, medium, light gray
		Chert - Brown 20%, Fragments very dense, DULL
		Traces of dark gray, non calcareous material
		LS - 90%, Light gray, to brown, Fine, Has calcite veins.
		Pyrite - Trace
		Chert - Brown, Dense, 10%
40		Dolo - Light grey, Trace, HAS BLACK SPECS
		LS - Light Brown + light grey
		calcite - xls
		Pyrite - Trace
		Brachiopod shell Fragments
		LS - Light grey, Fine
		Bryozoan, Crinoid stem
50		LS - 75%, gray, xline, Very Fine, calcite veins
		Shale - 25% gray, green,
		Bryozoan
		LS - xline, Dense, Fine grain, gray, calcite veins 50%
		Bryozoan, Brachiopod, coral? Fragments
60		Shale - gray green, 50%, DULL,
		Pyrit - Trace many Fossil Frags, crinoid stem, Bryozoa, , coral,
		LS - 25%, Light gray, Very Fine, Dense, calcite veins,
		Dolo - 25% DULL, gray, xline, Dense,
		Shale - gray, green, DULL 50%
		LS - 90% gray green, , DULL, Dense, Calcite xls,
		Dolo - xline, DULL,
		Pyrite - Trace,
70		Shale - 10% gray green, FOSSILS
		LS - gray, green, Fine grain,
		Dolo - DULL, black to gray, xline
		Shale -
		Pyrite - Trace
		Shale - gray green, SOFT, DULL, calcite xls.
		Bryozoa, coral Frags.
80		Shale - gray green, Loose, (SOFT)
		Calcite xls,
		Bryozoa Brach. Frags
		LS - Lt gray to gray green, Fine, Dense
		Pyrite - Trace
90		Shale - gray green, Thin beds show, Brach, Bryozoa, Coral
		LS - Lt gray to brown, Fine, Dense, DULL, Calcite xls
		Pyrite - Trace
		Shale - gray green, DULL Bryozoan Frags
		LS - Light gray, Fine, Dense, DULL, Calcite xls
		Pyrite - Trace
500		Shale - Green, Partings, Bryozoa, Brach. Frags

Sheet No. 2 Name of Well. Town well no 2 Survey No. W 18 24

Location ..... Date Drilled..... Analyst. Rush

5 00		LS-Light gray, medium, dense, xline
		LS-Light gray, medium, dense, Black Specs
		much Festain
10		LS-50%, Light gray, Fine, Dense, Blk Specs, calcite xls
		Dolo-50%, Light brn, to brn, medium, xline, Dense
		Green shale partings, Fossils
		70% LS-Light gray, Fine, Dense 20%
		Pyrit-Traces
		Green shale-20%, thin platy, Dense
20		Sand-10%, Angu subangular, coarse
	Pyrite	Sandstone-80% Light Brown To Brown, Angular Fractures, calcareous, sizes (50% 1st 2 meshes 30% 3rd mesh) 20% on 4th & 5th some rounded quartz grains. 10% clear + transparent, some in LS matrix, : Silt 10% Angular, Brown
	Pyrite	Sandstone - 90% clear quartz, medium to coarse, rounded to subrounded
		Siltstone - Light gray, brown 10%, soft.
30		Shale - Trace, green, soft, appears as partings
	Pyrite	Sandstone - clear subrounded to rounded grains,
		Sizes - 3rd mesh 60%, 2nd mesh 30%, 10% on 4+5.
	Pyrite	Some fragments of foreign matter
		Sandstone - quartz grains (size as above) Frosted rounded,
40		
	Pyrite	Sandstone - quartz grains, Frosted, rounded, Finer than above.
	Pyrite	SS-quartz grains, Frosted, rounded, size as above.
		Dolo-10%, coarse, xline, dense, Dark Gray
50		
	Pyrite	SS-quartz grains, Frosted, sub to rounded, 90%, size as above
		Dolo-10%, Xline, gray green, Dense,
		Shale-Trace, green, Dense.
	Pyrite	SS - As Above
		Shale-Trace, green
60		
	Pyrite	SS - As Above
		Shale-Trace, green
	Pyrite	SS - As Above
		Shale-Trace, green
70		
	Pyrite	SS - As Above
		Shale-Trace, green
	Pyrite	SS - As Above
80		
	Pyrite	SS - As Above
		Shale-Trace
	Pyrite	SS - As Above 60%
		Dolo-40%, Light Brown to white, xline, Dense, Hard, Thin, Platy, Fine to medium
		Shale-Trace, green
90		
	Pyrite	SS - As Above 80% Some in calcareous matrix
		Dolo-White to Light Brown 20% soft, Fine to medium
	Pyrite	SS-40%, As Above
		Dolo-60% white to light Brown, Fine grained, Dense, Hard, Angular Frags.
6 00		Shale-Trace, green

Sheet No. 3 Name of Well. Town well no. 2 Survey No. 1824

Location ..... Date Drilled ..... Analyst. RWS

6 00

SS - 80%, White quartz grains, Frosted, sizes as A Bove
Dolo - 20%, white, soft, Xline, sandy, Fine

SS - 20%, As A Bove
Dolo - 80%, white, Fine grained, xline, soft.

Shale - green, Trace

10

SS - 20% - As ABove
Dolo - White, 80%, Fine, xline, soft, Angular + rounded Frags

Pyrite Trace

Pyrite

20

Pyrite

~~10%~~ Dolo - white, saccahroidal, calc cement
SS - quartz grains, rounded, calc cement, white 10%
shale - green, Trace,
CALCITE XLS common

Dolo - 90%, white, sac, Xline, soft(?)
Trace of qtz sand grains, and calcite, some Fossil Frags,

SS - 60%, white, rnded, qtz, grns, calc cement, med - Fn,
Dolo - white, coarse, xline, brittle

30

~~10%~~ Dolo - Light gray to white, some Pink, very coarse, Hard, uneven Fracture;
SS - qtz grns, rounded, med, clear,
Pyrite Trace,

Dolo - light gray to brown, some Pink, coarse, Xline, Hard, 90%
SS - as above
Pyrite Trace - green shale Trace.

40

Dolo - light brwn, some Pink, 60%, coarse,
Shale - green, soft, thin plates, 10%,
Pyrite Trace, ss Trace - rnded, med, qtz grns;

Dolo - Light Brwn, Trace of Pink, coarse, Ang Frags,
sand Trace, Pyrite Trace,

50

Dolo - Light brn, med, Xline, dense, platy,
calcite XL Trace,

Dolo - 50% - white, Fn, dense,
SS - 50% - clear, qtz grns, rnded, med, calc cement,
Pyrite, calcite, - Traces

60

AS Above

AS Above

70

SS - clear, transparent qtz grns, rnded, 50% med, 40% Fn, calc cement
Shale - green, Trace,
Dolo - white Trace
SS - 80%, As Above
Shale - 20%, soft, green,

80

SS - As ABove
Shale - green, Trace

SS - 80%, As Above
Dolo - white, Fn, Dense 20%
Shale - Trace, green, Pyrite

90

Shale - 80%, green, soft, Dense,
SS - 20%, med to Fn, qtz grns, well rnded

SS - transparent, rounded qtz grns; 70% med, 10% coarse, 10% Fn, 10%
silt, shale (green) and very Fine Sand.

00

Sheet No. 4 Name of Well ..... Survey No. 1824

Location ..... Date Drilled ..... Analyst Rush

7 00

Dolo - AmorPhous, Dense, Hard, cherty, Light Blue To White, Sandy
very cherty, iron stains

Dolo - AS ABove
calcite xls - Trace
Pyrite - Trace

10

Dolo - 90%, white, Dense, Hard, Sandy, xline, iron stains,
chert - 10%, Blue-white, Hard
calcite xls.

- AS ABove

20

AS ABove

Dolo - 60%, white, xline, Dense, Hard, iron stains, Sandy
chert - 40%, white To light blue, Ang. Frags.

30

Dolo - coarsely xline, white, Dense, iron stains, sandy
calcite xls, cherty

Dolo - 90%, AS ABove
chert - 10%, blue-white, Hard, Ang
Shale - green, Trace,

40

AS ABove

Dolo - 90%, AS ABove
Shale - 10%, green, soft, contains Pyrite

50

Dolo - 90%, Light gray To white, coarse, dense
chert - 10%, white, dense, Hard,
calcite with Pyrite - Trace

Dolo - 90%, AS ABove
chert - 10%, AS ABove
shale - Trace, green

60

AS ABove

Dolo - 90%, gray, Hard, coarse, Dense
chert - 10% - Blue-white, Ang,

70

Dolo - 50%, Light gray - white, Dense, Amorphous,
chert - 50%, dark gray - white, Ang - round,
calcite xls - Trace

Dolo - 50%, gray To Dirty yellow, coarsely xline, Dense,
chert - 50%, Blue-white, hard, Ang.
Pyrite - Trace

80

AS ABove
Added Traces pyrite, calcite, greenshale

Dolo - 90%, Light brown, coarsely xline, Large, Ang Frags.
Shale - green, Trace, soft,
calcite xls - Trace, chert - Trace

90

AS ABove

Dolo - Fine Frags, white, xline, Dense, Hard
Pyrite, calcite, chert, Traces

00

Sheet No. 5 Name of Well ..... Survey No. 1824

Location ..... Date Drilled ..... Analyst RUSH

8 00	Dolo-Light brown, vuggy, coarsely xline, dense, Cherty
	Shale-green, Trace
	AS ABOVE
10	
20	
30	
40	
50	
60	
70	
80	
90	
00	

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented. FORM 410946

Ossian City Well
Ossian, Iowa

May 4, 1944
DAB & W.E.H.

530 feet of 12" hole
530-810 feet 10" hole

Drillers log
531-584 - St Peter Sandstone
584-689 - Dolomite (Willing River
689-705 Sandstone (New Richmond)
705-810 dd - Dolomite (Oneota)

Water horizons
550' - hit water in St Peter Depth to water 390 feet
600' - hit more water
700' - water rose to 385 feet but dropped back to 390 feet.

There was no bailing test made or pump test made on the St Peter Sandstone.

Bloyer wants letter stating top of Jordon.

Note
Sent Bloyer letter on May 13.

John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented. FORM 410546

Winneshiek County

Ossian, Iowa Jan. 13, 1944

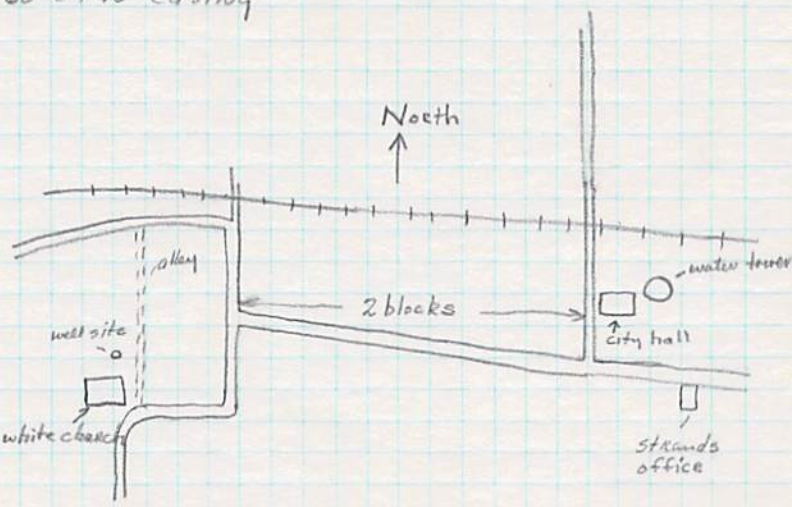
Town well No 2 site
Location SE ¼ NE ¼ SE ¼ Sec. 10, T. 96N., R. 8W
Elevation of Land surface about 1264 feet

Lloyd Strand - Mayor (lawyer
H.A. Dessel - councilman
Gus Klisart - do

Old well is now only 486 feet deep. There is 480 feet of 4½" pipe in hole. About 60 feet of water in well.

Not drilling on new well as yet but will probably start about first part of next week.

260' of 12" casing at well site
60' of 10" casing



W.E.H.

IOWA GEOLOGICAL SURVEY
Water Well Data Sheet

Survey Number W-1824

Town Ossian County Winneshiek T. 96 N., R. 8 W.

Name Ossian City Well #2 Location SE¼ NE¼ ¼ SE ¼, Sec. 10

Dubuque

Contractor Varner Well Drilling Co. Driller Ziegler Use City supply

Construction Drilled Drilling Dates _____ Drilling Depth _____

Topog. _____ Ground Elev. =1264± ' Ref. _____ Total Depth _____

Final Static Level _____ above / below curb Pumping Level _____ Draw down _____ gpm _____ 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 _____

Sample range _____ Laboratory Data Number samples 6 Number Duplicates 0 Cond. Good

Log (Yes) No, Cond. _____ Boxed Harris Lake Range 0 - 270 Date 1/20/44

270 - 480 4/16/44

480 - 495 4/18/44

495 - 810 5/12/44

810 - 965 5/19/44

Remarks _____

Microscopic Study Range _____ Strip Log _____ Gen. Log _____ Blue Print _____ Samples Washed _____

Insol. Res. Study Range _____ Strip Log _____ Gen. Log _____ Insol. Res. Prepared _____ Well Corel. _____

IOWA GEOLOGICAL SURVEY
Iowa City, Iowa

Well Log Record

Owner of well Ossian Town Well County Winneshiek

Tenant _____ Town _____

Location _____ sec. ___, T. ___ N., R. ___ E. W. _____ Twp.

Curb elevation _____ ft. Present depth _____ ft. final depth _____ ft.

Static level: (Depth to water above / below curb) _____ ft. Pumping level _____ ft. at _____ gpm.

Contractor _____ Date drilled _____

Description*	FEET Thick	From	To	Description*	FEET Thick	From	To
Wykoff		216	228	Gray & McGregor		485	490
Galena		228	387	McGregor		490	500
Gray		387	410	Pecatonica		500	517
Dilroch		410		Glenwood		517	555
Prosser spl		424	445	St. P		555	
McGregor spl		445	470				
Clay		470	475				
Clay + oil		475	480				
Clay + McGregor		480	485				

out of place

*Abbreviate descriptions; use one line for each formation.

Remarks on water zones and casings _____

Agnew 9/29/45

Temperature: Air ____ °F., Water ____ °F. at ____ A.M. P.M. _____ 19__

Record obtained from _____ Recorded by _____