

IOWA GEOLOGICAL SURVEY  
Water Well Data Sheet

W-1553

Survey Number ~~W-1553~~

Town Melcher County Marion T.      N., R.      W.     

Name Melcher #1 Test Location       $\frac{1}{4}$   $\frac{1}{4}$ , Sec.     

Contractor Thorpe Well Co. Driller      Use     

Construction drilled Drilling Dates 7/17/41 Drilling Depth     

Topog.      Elev.      Ref.      Total Depth 133 (?)

Final above

Static below Pumping      Draw      Time     

Level curb Level      down      gpm      pumped      Date     

Depth to      Calc. g/ft.      Prin.     

bot. pump      ft. with      ft. suction pipe. drawdown      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
<u>25</u>	<u>no test</u>	<u>    </u>	<u>    </u>	<u>1</u>	<u>    </u>	<u>Glacial Till</u>	<u>    </u>	<u>    </u>
<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
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Additional information     

Laboratory Data

Sample range 0-133 Number samples 31 Number Duplicates 24 Cond. root

Log No. Cond.      Boxed Hawkins Range 0-133 Date 5/22/42

Remarks     

Microscopic Study Range 0-133 Strip Log Ed Gen. Log      Blue Print      Samples Washed     

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

# THORPE WELL COMPANY

2340 SIXTH AVENUE  
DES MOINES, IOWA

Drilled for Town of Melcher at Melcher, Iowa

Well is located \_\_\_\_\_ miles N-E-S-W and \_\_\_\_\_ miles N-E-S-W from \_\_\_\_\_

in the \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_

Drilling started \_\_\_\_\_ 19\_\_\_\_ Completed 7/17/11 19\_\_\_\_

Well No. 1 Kind of Well Test Depth 132' Size hole started 16 in.

Finish 10" G. P. M. No test Static head \_\_\_\_\_ Drawdown \_\_\_\_\_

Water was first encountered at 25 in clay Approx. Amt. 1GPM Temp. \_\_\_\_\_

Remarks Surface water only

RECORD OF PERMANENT PIPE					TEMPORARY PIPE	
SIZE PIPE	AMOUNT OF PIPE	DEPTH TO BOTTOM OF PIPE	DEPTH TO TOP OF PIPE	MAKE OF PIPE	SIZE PIPE	AMOUNT

Driller \_\_\_\_\_ From Surface to \_\_\_\_\_ feet

Driller \_\_\_\_\_ From \_\_\_\_\_ feet to \_\_\_\_\_ feet

Driller \_\_\_\_\_ From \_\_\_\_\_ feet to \_\_\_\_\_ feet

AMOUNT IN FEET	KIND OF SOIL OR FORMATION (BE SPECIFIC)	TOTAL DEPTH FEET
2	Top soil black	2
8	Yellow clay stiff	10
31	Mixed clay- stiff	41
8	Stiff blue clay	49
31	Mixed clay	80
2	Sandy clay	82
8	Blue hard shaley	90
5	Gray shale	95
5	Shale sandy- rocks- bits of coal	100
2	Shale- very hard- mixed	102
2	Rocks & shale mixed- soft	104
1	Very hard limerock	105
2	Black shale	107
4	Gray shale slate	111
1	Coal	112
13	Gray shale	125
8	Mixed shale slate	133
Test Hole #2		
Depth	58'- Started 18" finished 12"-7GPM-Static head 11' Drawdown 55'	
3	Top soil	3
35	Clay	38
2	Cemented sand- yellow	40
2	Sand & clay	42
1	Clay	43
2	Sand- some clay	45
10	sand	55
3	Clay	58

Test Hole #3  
 Depth 150' Started 16" Finished 8"- No test

1	Black top soil	1
21	Clay	25
13	"- sticky sand	38
2	Sandy yellow clay	110
10	Clay- dry- yellow	50
5	Clay- mixed blue	55
30	Mixed blue clay	85
1	Blue shale	86
1	Rock	87
12	Shale- mixed dark	99
1	Rock	100
10	Shale- mixed- dark	110
25	Shale- red & gray mixed	135
15	Shale- dark & red mixed	150

Test Hole #4  
 Depth 30' Started 10" Finished 8" 5GPM Static head 4'

10	Black gumbo	10
1	Gray blue clay	11
2 $\frac{1}{2}$	Sand- fine	16 $\frac{1}{2}$
3 $\frac{1}{2}$	Clay- yellow- dry	20
3	Dry gravel	23
7	Blue mixed shale	30

Test Hole #5  
 Depth 38' Started 8" Finished 8" Static head 22'

3	Black top soil	3
17	Yellow clay	20
3	Blue mixed clay	23
$\frac{1}{2}$	Coal	23 $\frac{1}{2}$
11 $\frac{1}{2}$	Very sandy shale	38

Test Hole #6 Farm N.W. 1 $\frac{1}{2}$ - Auger hole  
 Depth 32' Started 6" Finished 6" No test

3	Top soil	3
15	Clay	18
1	Mixed coal- clay- pebbles	19
5	Clay	21
2	Clay- streaks of sand & gravel	26
2	Mixed clay- gravel -sand	28
4	Black shale- slate	32

Test Hole #7- Auger hole  
 Near river N.W. of town Depth 28'- 7" hole

10	River drift soil	10
10	Sand- very fine- yellow- dry	20
6	Muddy sand- drift wood	26
2	Blue shale- stiff	28

Test Hole #8  
 Depth 60' Started 8" Finished 8"- No test

5	Top soil	5
15	Clay	20
10	Clay & ricks	30
6	Very fine yellow sand	36
14	Blue sandy clay	50
4	Green & yellow mixed shale	54
6	Very stiff blue clay	60