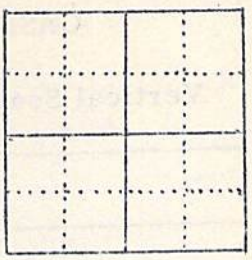
W 7905

IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey
RECORD OF WELL



Location:

Town: Milo (NE) (SW) :County Warren E.

NW¼ sec. 19 T. 77 N., R. 22 W. Twp. City

Well name and number Milo No. 1

Owner _____ Address _____

Tenant _____ Address _____

Contractor A. Brunekool Address Pella

Drillers _____

Drilling dates 9-13-56 9-21-56

Well data:

Altitudes: Drilling curb _____ feet; Land surface _____ feet

Determined by _____

Topographic position Upland

Total depth: Reported 475 feet, Measured _____ feet

Drilling method Cable

Hole and casing data 7" csg Length 393; Depth to bottom of pipe 391; Type cut #17 ~~Set~~

Original depth to water _____ ft. above/below _____ Date _____

Source of data _____

Sources of water: Principal 390-410

Others _____

Production Data

Date				
Static water level	127			
Measuring point				
Pumping water level	251			
Yield (g. p. m.)	18.5			
Duration of pumping				
Specific capacity				

Pump Data

Type pump _____ Column diameter and length _____

Cylinder or bowls diameter and length _____

Suction pipe _____ Airline _____

Power _____ Production _____ g. p. m. for _____ hours per day

Use of water _____

Dissolved constituents and properties (in parts per million except as indicated)

Date sampled				
Sampled by				
Silica (SiO_2)				
Iron (Fe)				
Manganese (Mn)				
Calcium (Ca)				
Magnesium (Mg)				
Potassium (K)				
Sodium (Na)				
Carbonate (CO_3)				
Bicarbonate (HCO_3)				
Sulfate (SO_4)				
Chloride (Cl)				
Fluoride (F)				
Nitrate (NO_3)				
Dissolved solids				
Hardness (as $CaCO_3$)				
Total				
Grains per gallon				
Noncarbonate				
Alkalinity (as $CaCO_3$)				
pH				
Specific conductance (micromhos at 25°C)				
Temperature (°F)				
Analysis No.				

Laboratory Data

EK3-4

Well No. W 7905 Sample range 0-175 No. of samples 91

No. of dupls. and cond. 91 Good Washed range 57-175

Samples prepared by Stone Date 8/14/56

Logged by Northup Date 10/3/56

Correlations by " Date 10/3/56

4/23/56

Milo (Warren Co.)

Art Brumekool called me yesterday to report the New Town well at Milo is believed to be complete at a depth of 475'. Brumekool requested help to conduct a pump test on this well Thursday - April 26.

The following data on the well was obtained:

7" casing set at 391'.
Top of Mississippian at 410'.
Well drilled to 420' - SWL 185' - Tested 20 gpm at 350' PL - water samples obtained.
Well drilled to 455' - Tested 20 gpm at 300' PL.
Well drilled to 475' - Tested 24 gpm at 275' PL.
Base of St. Louis at 475' (Brumekool).

JBC

7905

Name Milo town well No. 4 (1956)

Loc. NW 19-75N-22W, Warren Co.

T.D. 475'

Drilled Brainckool April 1956

Log W-7905 Northup

Casing 393' of 7" csg. +2 to 391

Prod. Data

SWL 177'

PWL 251'

Yield 18½ gpm

Main water 390-410

$\frac{.25}{84} = .30 \times 10^{-}$

251 − 177 = 74; 18.5 / 74 = .25 g.p.f.

.25 / 84 = .003

Water analyses: No. 21993 (4718) 4/27/56; No. 21995 (4720) 4/21/56

Some water from ...

ELEV 973-3 Not used never connected to system only hand pump now SWL 11.54' ?

Elev. 970

Formation	Depth	Top	Base
St. Louis	405		

475
391
84

MILO

3- APR - 92 N-45 ABOVE - 500 GAL MIX -
NO IND OTHER THAN LOCKER 2/3 OF POP. USE
THIS INFORMATION REGARDS SHALLOW WELLS

FRANKLIN HOUSE DRILLED PRESENT shallow plaintown WELLS that supply the town

WELL RECORD

Well is located ..... miles N E S W and ..... miles N E S W from

Milo (Nearest Town) in Warren (County),

in the ¼ NW ¼ Sec. 19 T. 75 R. 22

Owner ? Well No. .....

Postoffice address Milo

Contractor Art Brumbaugh

Address Pella

Driller Art

Well begun 4-13, 1956;

completed 4-21, 1956

Rig used—Cable, Rotary, Jet, or Cable

Depth of well 475 (Feet)

Size of hole (note total amount of each size) 6¼

Main water supply at 390 - 410 (Feet below surface)

Final water head ..... (Feet above or below surface)

Is well pumped? .....

Yield ..... (Gallons per minute)

Water level when pumping .....

Position of well upland (Upland, valley, side hill, etc.)

Date and Time	Water Level	SOURCE OF WATER: Depth	SOURCE OF WATER: Type of Rock	Production in Gallons per Minute	Pumping Level
4-20	185	420		20	350'
4-21	180	465		20	308'
4-21		475		24	275'
Pumping Test					
4-26	176.8			14.4	236.
				18.5	251

NOTE: Water levels should be recorded at time of change AND at regular intervals; for example each morning before drilling starts or at the end of each 100 feet of drilling.

RECORD OF PERMANENT CASING

Size Pipe	Amount of Pipe	Depth to Bottom of Pipe	Depth to Top of Pipe	Type* and Weight of Pipe	DIAGRAM OF WELL
7" OD	398	391	2+	17#	

*As cast, wrought iron, steel, concrete, etc.

Is screen used?..... Diameter..... (Inches)

Length..... (Feet) Depth to bottom.....

Depth to top.....Slot size.....

Are packers or seals used?.....

Kind .....

Where used.....

Kind of pump.....Dia..... (Inches)

Capacity of pump..... (g.p.m.)

Power used..... (Kind and amount)

Depth to bottom of pump line.....feet,

including .....feet tailpiece.

Remarks on construction of well.....

.....

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	0	5		Top soil
	5	10		Yellow clay
	10	15		gray "
	15	20		" "
	20	25		"
	25	30		" "
	30	35		" "
	35	40		" " hard
	40	45		yellow clay sandy
	45	50		gray shale
	50	55		" "
	55	59		
	59	65		Sandstone No Sample
	65	75		"
	75	80		" Salt Water
	80	90		" "
	90	101		" "

Set 10" casing at 59

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	100	105		Shale R.B.
	105	110		rock shale Band
	110	115		"
	115	120		Blue shale
	120	125		Gray "
	125	130		" "
	130	135		red "
	135	140.		" "
	140	145		gray "
	145			" "
	150	155		" "
	155	160		" "
	160	165		"
	165	170		" "
	170	175		" "
	175	180		" "
		185		" " R B

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	85	190		Shale R.B
	190	195		" "
	95	200		" "
	200	205		" "
	205	210		"
	210	215		"
	215	220		"
	220	225		
	225	230		
	230	235		" sandstone shale Bands
	235	240		" " "
	240	245		red shale
	245	250		" "
	250	255		Gray " R B
	255	260		" " R B
	260	265		" "
	265	270		" "

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	270	275		gray shale
	275	280		"
	280	285		sandstone dirty
	285	290		" "
	290	295		gray shale
	295	300		" "
	300	305		" "
	305	310		red lime
	310	315		shale rock band
	315	320		red shale
	320	325		gray shale R.B.
	325	330		" " "
	330	335		" "
	335	340		" "
	340	345		"
	345	350		" "
	350	355		" " "

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	355	360		Gray Shale Rock Band
	360	365		" "
	365	370		" "
	370	375		Dark Sandstone
	375	380		" "
	380	385		" "
	385	390		"
	390	395		"
	395	400		
	400	410		"
	410	415		Lime Sand SS.
	415	420		Lime
	420	425		Sandy Lime
	425	430		Lime
	430	435		Lime
	435	440		"
	440	445		"

Sample No.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	445	450		Lime Sandy
	450	455		"
	455	460		"
	460	465		"
	465	470		" sandy
	470	475		Lime darker

8" 10

FOR FIGURING, CASING TALLY, ETC.

21	—	7
19	—	2
18	—	4
18	—	4
20	—	2
20	—	11
21	—	3
21	—	4
21	—	7
20	—	9
203		53

FOR FIGURING, CASING TALLY, ETC.

at 17# 7"OD at 391'