

#28254

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	0	1	
	2	7	
	7	10	
	10	13	
	13	29	
	29	43	
	43	123	
	123	127	
	127	180	
	180	191	
	191		
	420		

#28254

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
CLAY BROWN SILTY IF 7-10
SAND CLAY-YELLOW
4 BEOMIX (CLAY, SILTY) YELLOW-ORANGE
SAND TO FINE GRAVEL
BLUE-GR. TILL ? wood at 26
LIME STONE 191-192
COLE
that said GREEN-GR SHALE CHEST & PY SANDY DOLA.
CLAY SHALE - BL-CHEST CHEST & PY BLUE-GR. TILL
DOLA. COARSE GRAINED SOME CHEST
COLE
191-192

#23254

#23254

SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS
	From	To		KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
7/21/75			8.0	<p>LOADED AIR COMPRESSOR + HOSE;            MOVED RIG TO NWS + SET UP;            RUN IN HOLE WITH 3 1/2" BIT;            CLEANED HOLE TO 421'; AIR            LIFTED HOLE FOR 17.4 HRS.;            HOLE PUMPING 30 TO 50 GPM WITH            200' OF DRAW DOWN; TOOK AIR            COMPRESSOR TO WALK HALL + UNLOADED;            6.5            LOADED GEN + PUMP FOR</p>
7/22/75			7.5-5.0	<p>RUN FLOW METER <del>ON</del> BELOW            TEST PUMP; PUMP SET AT 90'            WELL PUMPING 6 GPM WITH 40' OF            DRAW DOWN; PULLED PUMP;            WENT TO OFFICE</p>

#23254

#23254

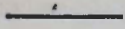
SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS
	From	To		KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
7/23/75			2.5 m	<p>SET PUMP WITH PACKER AT 140' + 128'; STATIC 267'</p> <p>INFLATED BOTTOM PACKER; STATIC BELOW PACKER APR 29'; STATIC ABOVE PACKER APR 15' AFTER 1 1/2 Hrs.; DEFLATED PACKER; STARTED PUMPING OPEN HOLE 12 G.P.M. AT 70'; INFLATED TOP PACKER PUMPING LEVEL WENT TO 78'; FINISHED TESTING + PULLED PUMP.</p>
7/24/75			2.5 -	<p>TOOK DOWN RIG MOVED RIG + EQUIP. TO NO. 11 OF POWER STATION SETUP RIG</p>

SITE # 5  
HOLE # 1

085-08W-20ABCD

Book # 1

# DRILLER'S NOTEBOOK



## WELL RECORD

Driller.....

Address.....

.....



Owner.....

Tenant.....

Address.....

.....



RETURN TO  
**IOWA GEOLOGICAL SURVEY**  
IOWA CITY, IOWA

HOLE #1

085-08W-20ABCD-1

ELEV 4805'

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
10-12-72	0	2	
6 3/4" HOLE	2	7	
	7	10	
	10	13	
	13	17	
	17	20	Boulder H+
	20	25	
	25	29	
	29	30	
	30	35	
	35	39	Mix 150# BENTONITE
10-13-72	39	40 1/2	
	SET 5" CASING		
5" HOLE	40 1/2	45	
	45	50	
	50	55	
	55	60	

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
TOPSOIL
SD, YEL
SD FINE, ORANGE, SILTY CLAY TOWARDS BOT
SD, MED, YEL BRN
CLAY, GRN GR, CALC, SILTY, FADING TO BL GR
T. H. BL GR, GRAVELLY
Q.A.
Q.A. TRACES WOOD
LS, TAN GR, O, #
LS, BRN G, CALCITE, S
LS, BRN, CALCITE, S, LITTLE G, IS, RP MIXED
LS, BRN, FOSSILIFEROUS
LS, BRN, FOSSILIFEROUS
Q.A.
Q.A.
Q.A.

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
5" HOLE	60	63	
10-16-72	BEGIN CORING		
	63	73.3	Box #1
	73.3	83.6	
	83.6	93.6	
	93.6	103'	
	103	113	
	113	123	DR. 121' O.P.S? Box #8
10-17-72	REAM TO	5" HOLE TO	123'
10-18-72	123.5	133	
	133	143.2	S.G. 138.7 COL?
	143.2	153	← KEN 152' BERT?
	153	163	
	163	169±	←
	169±	173	
10-19-72	REAM TO	5" HOLE TO	173'
10-20-72	Shale covered in		
10-24-72	SWL 28'		

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
LS, TAN LITH (60-61) LS, BRN, FOSSILIFEROUS
LS, BRN LITH, W/LS, BRN, FOSSILIFEROUS, ASSOCIATED
LS, BRN LITH, BRN, ASP. W/LS, BRN COARSE GRAINED
LS, BRN COARSE GRAINED, LS, GR, LITH, BRN LITH;
LS, BRN LITH, INDICATED IN SPOTS, SHALEY IN SPOTS 94.4 TO 94.7 FINGERED BY CHIT LEANING S. SIDE
LS, BRN LITH, 5' INTERVAL VERY SHALEY
SH, GR GR TO 116.8' LS, BRN, LS, TAN, DOOR LITH, 121' FOSSILIFEROUS
LS, LT BRN, <sup>LITH</sup> THINLY BEDDED, FEW STYROLITES, MINOR CHIT, OFF WH, DO, BRN, (128.4 - 129.2), LITH
LS, LT BRN, LITH, THINLY BEDDED, TO 138.5'; DO, BRN, COARSE GRAINED, CHIT, OFF WH → P. 180 WHEN CLEAN
DO, BRN, COARSE GRAINED, W/EMBEDDED CHIT, GR, (TO 152')
LS, LT GR (152-152.5), DO, PALE ORANGE BK MOTTLING, LS, GR, SDY, SHALEY (GRN), GRADING TO LS, BRN, LITH, W/ NUMEROUS CALCITE NLS
LS, GR (163.9), SH, GRN, SDY, X, W/LS, GR; RETRIEVED 4.2' OF CORE SHWASHED OUT
SH, GRN, SDY, TO 172'; LS, BR GR
OVERALL LITH

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
10-24-72	173	177	
	177	180	
	180	181	
	Mix 250 <sup>+</sup> BENTONITE.		
	HOLE STILL CAVING		
	181	185	
	185	190	
	190	191	
	191	201.4	Box 12
10-25-72	201.4	211.8	
	211.8	222.2	
	222.2	234.6	
	234.6	243	
10-26-72	243	253	
	253	263.3	
	263.3	273	
	273	283	

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
X Sh, GRN, LS, GR; CHT, GR TO WHT
X Sh, GRN, LS, GR; CHT, GR TO WHT
o.o.
Dol, GR MIXED W/ WHT MARG. GR. & CHT, GR
Dol, GR, POROS., CHT, GR, W/ DISSEMINATED PYRITE
Dol, oo
Dol, LT TAN - GR MIXED, COARSE GRAINED, CHT, GR
Dol, LT TAN TO 205.4; BECOMING MORE BL GR; CHT, GR, W/ WHT OUTER MARGIN
Dol, BL GR TO 214.4; BECOMING LT TAN; CHT, BL GR, W/ WHT OUTER MARGIN; BROKEN, FOSSILS
Dol, LT TAN; CHT, GR. TRIPOLITIC.
oo
Dol, LT TAN, CHT, LT GR & WHT, TRIPOLITIC
Dol, oo, CHT, oo
Dol, oo, CHT, oo, NOTE FRACTURED BELOW 268, FRACTURE CALCITE FILLED, CAN SEE SMALL AMOUNT SLIPPAGE!
Dol, LT TAN, CHT, GR TO DK GR, ↗

205  
285  
530

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
10-27-72	283	293	←
	293	303	←
	303	313	←
	MOVE OFF SITE		
11-6-72	MOVE BACK ON SITE		
	SWL ≈ 24'		
	313	323.2	←
	323.2	333	←
	333	343	←
11-7-72	343	353	←
	353	363	←
	363	373	←
	373	383	←
	383	393	←
11-8-72	393	403	←
	403	413	←

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Dol, AG, CHT, GR TO 285.4' SA, DK GR, SILTSTONE ALL G MIXED TO 288'; Dol, GR-TAN MIXED, SOME GRN STAINING; 20' BOTTOM 28' OF CORE SA, GR & SA, DK GR, SILTSTONE MIXED TO 293.9'; Dol, GR, FRACTURES CALCITE LINED, CLAY SEAMS GRN
Dol, GR, GRN STAINING; SA, GR, SOME GRN PYRITIC
Dol, BL GR - LT TAN MIXED, MED TO COARSE GRAINED, GRN CLAY SEAMS, BECOMING SLIGHTLY VUGGY BOTTOM OF INTERVAL, ⊕
Dol, GR, CHT, GR-WHT, (320')
Dol, GR-TAN MIXED, CALCITE LINED CAVITIES, PYRITIC BOTTOM 2' OF INTERVAL ⊕
Dol, AG, CHT, WH, TRIPOLITIC, EMBEDDED 5' GRN CLAY SEAMS.
Dol, GR-TAN MIXED WITH SPOTS OF STAINES, COARSE GRAINED, NUMEROUS CLAY SEAMS, CHT WH, TRIPOLITIC
Dol, AG, ⊕ 5'
Dol, AG, SA, GRN, OCCURRING
Dol, GR, NUMEROUS GRN CLAY SEAM
Dol, GR-TAN MIXED, PYRITIC, CHT, WH, EMBEDDED FOSSILS & PYRITE (449.5' BEGIN PICKING UP)
Dol, GR-TAN MIXED; CHT, WH TO GR

SAMPLE NO.	DEPTH		THICKNESS	DESCRIPTION OF BEDS
	From	To		KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
413		423.2	←	Dol, aa; CHT, aa; SH, GRN, Dolomitic, 2' 420.2'
	423.2	433	█	SH, aa.

USGS *university*

Drillers No. 5 W-Number 23254 Location 085-08W-20 ABCD  
Name SW of Center Point "Bridge hole", Lincoln County Iowa

Status: Incomplete 19; Complete 8-30 1973; Destroyed 19

Total Depth 433, 11-8; 72; 10; 10-12 1972

Cuttings from 0 to 63 Core from 63 to 173  
from 173 to 191 from 191 to 433  
from      to      from      to     

Hole diameter 6 3/4 in from 0 to 40; 4 in from 193 to 421  
5 in from 40 to 193; 3 in from 421 to 433

Casing 5 in from 41 to 39.5 Type T+C Steel  
4 in from 147.7 to 177 Type STEEL WELDED  
     in from      to      Type     

Formation tops, indicate source; D, driller; I, initial; S, in study  
Pleistocene 29 thick, top at 0 Bertran 18.5 thick, top at 152.5  
Rapid Solon 39.5 thick, top at 29 F Silurian 250 thick, top at 171 I  
Davenport 11.7 thick, top at 68.5 Maquoketa      thick, top at 421 I  
Spring Grove 13.8 thick, top at 80.2 Power 117 thick, top at 171  
Kenwood 23.3 thick, top at 94 Hopkinton 108 thick, top at 285 193  
Otis 21.2 thick, top at 117.3 Kankakee 31 thick, top at 389 393  
Coggon 14 thick, top at 138.5 Cyanoxen 26 thick, top at 320 346

5-21-70

Spoon samples from      to     ; from      to     ; from      to       
from      to     ; from      to     ; from      to       
from      to     ; from      to     ; from      to     

Boulder & 10'

Geophysical logs; include remarks, temporary casing or drillstem if any, and an evaluation of the quality of the log.

S. P. from 192.5 to 433; Power      =                                
Resistivity from 192.5 to 433; Good  
Conductivity from 23 to 400; Power       
Temperature from 23 to 400; Power       
Caliper from 38 to 400; Good  
Flow Meter from 23 to 400; Push - - No Natural Flow detected, No pumping flow test  
Natural Gas from 5.25 to 4.4; Good T.C. 4 Sens. 4.13  
Gamma Gamma from 5.25 to 400; Good T.C. 4 Sens. 0.60  
Neutron from 4 to 400; Good T.C. 4 Sens. 1.10

Permeable zones from 202 to 243; from 293 to 313; from 343 to 393  
from      to     ; from      to     ; from      to     

Description of measuring point       
T.C. located .80 feet above L.S.D.  
M.P. Altitude      L.S.D. Altitude 805 surface of alt. sea 7 1/2 tops

Water Level below M.P. 20.63 ft., on 3-28 1973; 22.36 ft., on 10-23 73  
25.31 ft., on 8-29 1973;      ft., on     

Cuttings studied by Case, Core studied by Koch & Barker

File location: P18-793

Well BRIDGE

Date 23 JULY 75 Page      of     

Feet below land surface to: Upper Packer 126 Lower Packer 139 Pump intake     

Airline setting in feet below measuring point: Green      Yellow     

Measuring point is      and is      feet above <sup>W.L.</sup> land surface

Time	Electric Line or Tape		Green Airline		Yellow Airline		Water Meter or Orifice Bucket Read	Discharge cpm	Remarks
	Reading	W.L.	Read	W.L.	Read	W.L.			
1000 ±	27'	26'	STATIC LEVEL		---	---	EMPTY HOLE		
		25.85	"	"	----	----	PUMP IN HOLE		
			46.5		54.5				
1055							L PACKER 147.		
1103		23.86							
1109		21.66							
1116		20.00							
1133		17.84							
1144		17.12			53.5				
1200		16.74							
1231		15.55	50.5		53.5				
1235							L PACKER 147		
1238			47.5						
1240							Pump ON		
1244			25				17.7 GPM		
1256			25				~17 GPM		
1257							U. PKR 1277		
1258			23.5						
1501			35				Pump OFF		
1502			39						
1502.5			39						
1503			39						
1504		17.15	39.5						
1508							U PKR 1274		
1510			45.5		53.5				
1511			45.5						
							NO WATER ... << 1 GPM		

Well No. \_\_\_\_\_

Date \_\_\_\_\_

23 July 75  
BRIDGE  
HOSE

Land Surface

Upper Packer

Pump Intake

3/4" Union

Lower Packer

