

COUNTY

DOUGLAS

LOCATION

12-19E-24DD

DATE

NOV. 4, 1944

PERFORMED BY LAYNE-WESTERN FOR City of Lawrence

DISCHARGE ~~200~~ VARIABLE, 393 - 439 gpm

LENGTH OF TEST 720 min

OF OBSERVATION WELLS none

DISTANCE(S) TO PUMPING WELL .75' (2.)

WATER LEVEL = 13'

AQUIFER TYPE Alluvial (KANSAS River)

DEPTH OF TEST WELL 50'

SCREEN — ?

COMMENTS: Drawdowns increase to about 4 feet for the first 100 minutes then change only tenths of a foot for the remainder of the test. A high error is calculated. The storage value becomes very high.

COMPUTER ANALYSIS

METHOD	T (gpd/ft)	S	RMS error	r
THRS. VQ	94,177	—	1.13	.75' (to 400min)

City of Lawrence No. 1

Description of Material	From (In feet)	To	Thick- ness	Remarks
Dark brown silty top soil and some arkosic sd. and gravel -----	0	2½	2½	3 or 4 inch bed of sd. and gravel at 2 ft.
Dark silty top soil -----	2½	6	3½	
Dark brown silty cly.- soil -----	6	13	7	Some dark gray, soft cly. near base.
Gray msd. to fgr. -----	13	20	7 1105	Mostly sub-ang. qtz. csd. and fg abundance of small green pebbles occasional larger pebb.
Gray csd. to mgr. -----	20	30	10 1113	Major grade is qtz. fgr; some foreign material in sample as we had to drill with heavy mud.
do. (more poorly sorted than the above) -----	30	40	10 505	Major grade is fgr. to mgr. ; few lt. gray ss. frags and shel frags.
do. -----	40	45½	5½ 2784	do.
Lt. gray sdy. shale and ss. -----	45½	50	4½	Drilled slow and smooth.

Bottom of test at 50 ft.

Nov. 5, 1940

Water sample No. 654

Water level at approx. 13 ft.

Perry McNally

59' 5E of Pump House
City of Lawrence
water dept

Bottom 4 feet has coarse sand & gravel, some boulders. completed Nov. 1944.

Drilled by Payne-Walsh

Well No. 1, Lawrence, Kansas

Time	Rate of pumping (H.P.M.)	Drawdown (feet)	Specific capacity (gpm/ft dd)
0 9:30 a.m. Nov. 4, 1944	393 52.54	7' - 8"	(15) 51.5
40 10:10	401 53.61	9	1.33 44.5
50 10:20	407 54.41	9 - 10	2.16 41.5
70 10:40	448 59.89	10 - 10	3.16 41.5
100 11:10	448	11 - 4	2.66 39.5
130 11:40	448	11 - 7	3.21 38.5
160 12:10 p.m.	448	11 - 7	3.91 38.5
190 12:40	448	11 - 7 1/2	3.11 38.5
220 1:10	439 58.69	11 - 6	3.11 38.0
250 1:40	435 58.16	11 - 5	3.75 38.0
280 2:10	435	11 - 5 1/2	2.7 38.0
310 2:40	435	11 - 5 1/2	38.0
320 2:50	439 58.69	11 - 5	38.0
340 3:10	445 58.16	11 - 6	38.5
370 3:40	439 58.69	11 - 7	2.1 38.4
400 4:10	439	11 - 8	4.11 37.5
430 4:40	435 58.16	11 - 5	3.1 38
460 5:10	435	11 - 6	3.1 38
490 5:40	435	11 - 7 1/2	3.1 37
520 6:10	435	11 - 7	3.1 37
550 6:40	439 58.69	11 - 8	4.06 37
580 7:10	439	11 - 9	4.13 37
610 7:40	439	11 - 9	3.1
640 8:10	435 58.16	11 - 9	3.1
670 8:40	435	11 - 9 1/2	3
700 9:10	435	11 - 9	3
720 9:30	435		

15 feet of 18 inch Payne shutter screen at bottom.
 18 - inch Armes iron from top of screen.
 38 - inch outer casing extends 21 feet below land surface.

12-19E-24 DD

COUNTY DOUGLAS

LOCATION 12-20E-17AAB

DATE 11-1-76

PERFORMED BY LAYNE-WESTERN FOR RWD#13 (TRI-COUNTY)

DISCHARGE 430 gpm $\div$ 350 gpm (last 40 min) 1'

LENGTH OF TEST 600 min 15 min recovery

OF OBSERVATION WELLS none

DISTANCE(S) TO PUMPING WELL 1.5'

WATER LEVEL = 19'

AQUIFER TYPE ALLUVIAL (KANSAS River)

DEPTH OF TEST WELL 76'

SCREEN 20' of screen in MC sand & Gravel and Rough Boulders

COMMENTS The errors are high for these analysts. The Transmissivity is low for the Kansas alluvium and the amount of screened material.

COMPUTER ANALYSIS

METHOD	T (gpd/ft)	S	RMS error	r
D-R	123,421	.0018	.79	.5'
Rec	—	does not converge		.5'
Theis	88,672	.07	.74	.5'



WELL INFORMATION

Layne-Western Co. Inc.

1. CONTRACT RURAL WATER DISTRICT No. 13
2. City, State JEFFERSON COUNTY, KANSAS
3. Well No. 2 at Test Hole No. 1-72
4. Well Location (attach map) should read 12-20E-17AAB
NW 1/4 NE 1/4 17-12-20
in Douglas County
5. Driller B. BOWLES
6. DATE 10-26-76
7. Date Started 10-26-76
Completed 11-1-76
8. Drill Crew Man Hrs. —
9. Working Days
Drilling —
Other —

10. MATERIAL IN WELL			GAGE NO.	WALL THICK- NESS IN.	MATERIAL	TYPE	NO.
	LENGTH FT. IN.	DIA. IN.					
Screen	<u>20' 0"</u>	<u>12"</u>	<u>—</u>	<u>.370</u>	<u>STAINLESS STEEL</u>	<u>SHUTTER</u> Shutter Keystone	<u>6</u> Openings
Inner Casing	<u>57' 8"</u>	<u>12"</u>	<u>—</u>	<u>.370</u>	<u>STEEL</u>	<u>WELDED</u> Welded Seamed	
Outer Casing	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u> Welded Screwed	

11. GRAVEL

Size BUILDERS #25

Tons 16 1/2

12. SEALING CASING

Puddled Clay (Yes) (No)

With — Bags Bentonite Added

or

With 9 Bags Cement

Seal Material Placed in
Well With TREMIE PIPE

Bottom of Well Screen
Sealed With 1/4" STEEL PLATE

13. WELL DIMENSIONS

A. Total Depth 77'-8"
(From Top of Inner Casing to Bottom of
Well)

B. Height of Inner Casing 2'-0"
(Above Ground Level)

C. Distance to Top of Gravel 20'-0"
(From Ground Level)

D. Diameter of Drill Hole 30"

Comments NONE

Layne-Western Company

Contract Name Tri-County Water District

Job No. KC-964

Date 8-3-72

City Lawrence

State Kansas

Driller Larry Volkart

TEST HOLE

No. 1-72

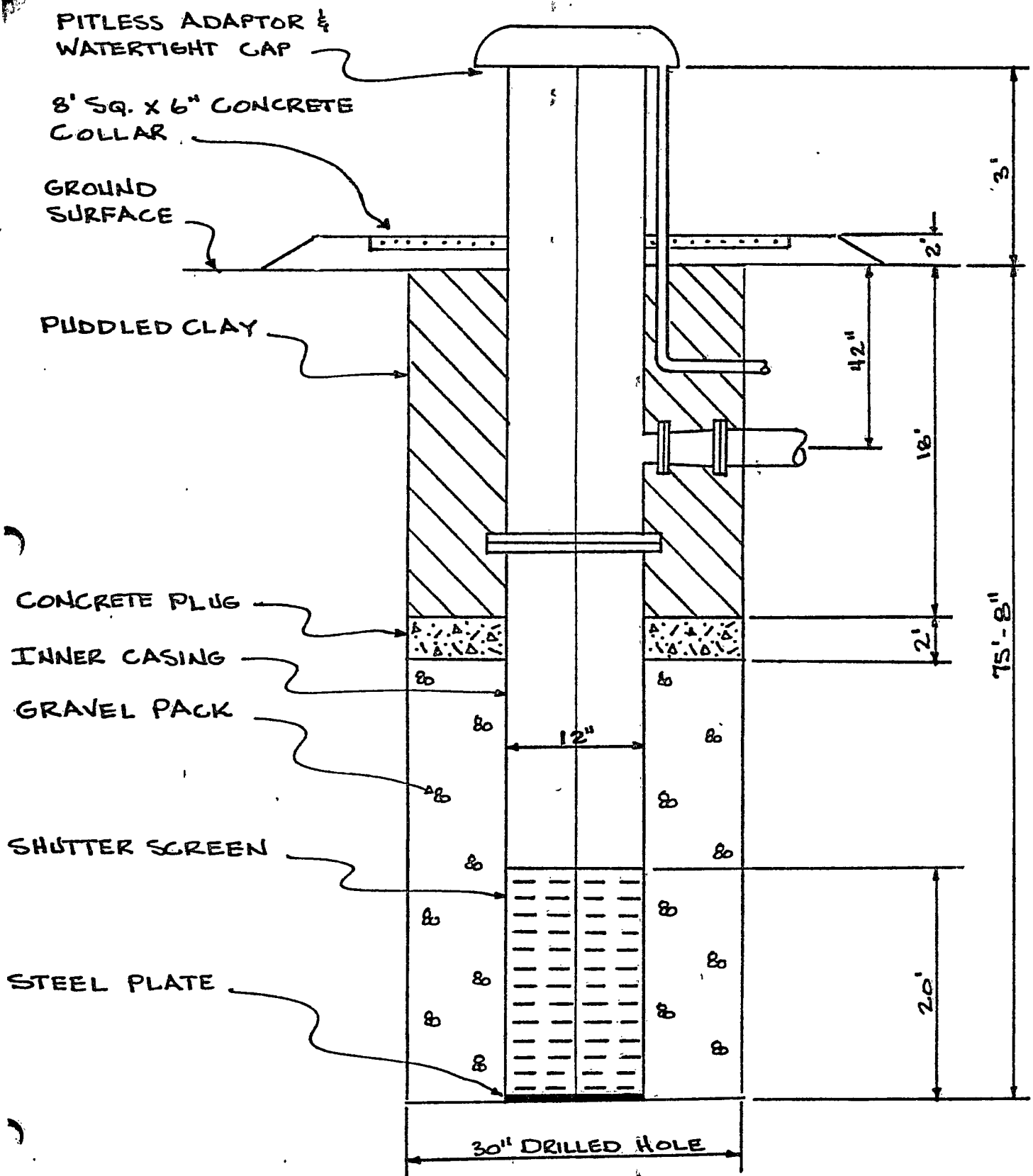
Test Hole Location 92½' S. of Cottonwood Tree and 22½' E of centerline of
Distance and Direction from Permanent Landmark or Previous Test Hole private road

TEST LOG

FROM	TO	MARSH FUNNEL VISCOSITY SECONDS	MUD PIT LOSS INCHES	Static Water Level <u>19'</u> Measured
				<u> </u> Hours After Completion
				FORMATION
0'0"	2'0"			Topsoil
2'0"	10'0"			Gray, clay
10'0"	29'0"			Brown, clay
29'0"	33'0"			Brown, medium to coarse sand
33'0"	40'0"			Gray, medium to coarse sand
40'0"	45'0"	45	4"	Brown, medium to coarse sand and gravel
45'0"	50'0"	45	5"	Same
50'0"	55'0"	45	2"	Same
55'0"	60'0"	40	7"	Same
60'0"	65'0"	40	6"	Same
65'0"	70'0"	40	6"	Same
70'0"	77'0"	40	4"	Brown, medium to coarse sand and gravel, few boulders
77'0"	80'0"			Gray, shale
80'0"	Total Depth			

NOTES: Size of Pit 4' X 3' X 3' **DEEP**

R.W.D. No. 13
CONSTRUCTION OF WELL
WELL No. 2



NOT TO SCALE

12-20E-17 AAB
Rural Water District No. 13 in Douglas Co. DATE 11/1/76
KITA HILL CO. 795 6521

ON Jefferson County, Kansas WELL NO. 2 JOB NO. A-256-N

Curtis Dalton McLoath

15'

TIME OF DAY	ELAPSED TIME IN MINUTES	TAPE READING	WATER LEVEL BELOW MS PT	DRAWDOWN IN FEET	PUMPING RATE OF TEST WELL
10:00 a.m.	S.W.L.	22'3"			
	0	22'3"			
	0.5	23'5"		1'2" 1.167	430 gpm
	1.0	24'9"		2'6" 2.5	430 = 57.49
	1.5	25'2"		2'11" 2.917	430
	2.0	25'9"		3'6" 3.5	430
	2.5	26'4"		4'1" 4.08	430
	3.0	27'3"		5'0" 5.0	430
	3.5	27'5"		5'2" 5.17	430
	4.0	27'8"		5'5" 5.42	430
	4.5	27'9-1/2"		5'6-1/2" 5.54	430
	5.0	27'11"		5'8" 5.67	430
	7.0	28'3"		6'0" 6.0	430
	9	28'3-1/4"		6'1/4" 6.02	430
	11	28'3-1/2"		6'1/2" 6.04	430
	15	28'3-3/4"		6'3/4" 6.062	430
	20	28'4"		6'1" 6.07	430
	25	28'4-1/2"		6'1-1/2" 6.125	430
	30	28'5"		6'2" 6.17	430
	35	28'5-1/4"		6'2-1/4" 6.19	430
	40	28'5-1/4"		6'2-1/4"	430
	45	28'5-1/4"		6'2-1/4"	430
	50	28'5-3/4"		6'2-3/4" 6.23	430
	60	28'6-1/2"		6'3-1/2" 6.29	430
	70	28'7"		6'4" 6.33	430
	80	28'7-1/4"		6'4-1/4" 6.357	430
	90	28'7-3/4"		6'4-3/4" 6.395	430
	100	28'8"		6'5" 6.417	430
12:00 Noon	120	28'8-1/4"		6'5-1/4" 6.44	430
	150	28'9"		6'6" 6.5	430
	180	28'9"		6'6"	430
	210	28'9-3/4"		6'6-3/4" 6.562	430
	240	28'9-3/4"		6'6-3/4"	430
	270	28'10"		6'7" 6.58	430
	300	28'10-1/4"		6'7-1/4" 6.60	430
	360	28'11"		6'8" 6.67	430
	420	28'11-1/4"		6'8-1/4" 6.688	430
	480	28'11-1/4"		6'8-1/4"	430
	540	27'9"		5'6" 5.5	350 gpm = 46.74
8:00 p.m.	600	27'9-1/4"		5'6-1/4" 5.52	350
			RECOVERY		
	1 601 = 6.0017	23'8"		1'5" 1.42	
	2 602 = .00	23'6"		1'3" 1.25	
	3 603 = .00	23'5"		1'2" 1.17	
	4 604	23'4"		1'1" 1.08	
	5 605	23'3"		1'0"	
	7 607	23'1-1/2"		0'10-1/2" .875	
	9 609	23'0"		0'7" .58	
	11 611	23'0"		0'7"	
	15 615	23'0"		0'7"	

COUNTY DOUGLAS

LOCATION 12-20E-30BCB

DATE Sept. 21, 1968

PERFORMED BY LAYNE-WESTERN FOR DOUGLAS CO. RWD#1

DISCHARGE 201 gpm

LENGTH OF TEST 60 min recovery for 30 min

OF OBSERVATION WELLS none

DISTANCE(S) TO PUMPING WELL .5'

WATER LEVEL = 11'

AQUIFER TYPE ALLUVIAL (KANSAS RIVER)

DEPTH OF TEST WELL 47.5'

SCREEN 20' of screen at bottom of well in FMCS, some gravel boulders at last 2'

COMMENTS - The computer plot shows a very flat curve. Storage cannot be calculated here and the Transmissivity seems low for the Kansas alluvium and 120 feet of screened material. The discharge rate is low for a test in the Kansas alluvium.

COMPUTER ANALYSIS

METHOD	T (gpd/ft)	S	RMS error	r
D-R	106,739	1.2×10^{-7}	.15	.5'

104 91 65 FL
WELL INFORMATION



Layne-Western Company

Jerome N. M. Z. Leary

1. CONTRACT DOUGLAS COUNTY
RURAL WATER DIST #1
2. City, State LAWRENCE KANSAS
3. Well No. 3 at Test Hole No. 1-68
4. Well Location (attach map) 1/4 EAST OF
WATER PLANT
12-20E-30-bcb

5. Driller R.L. SANSBURY
6. DATE SEPT. 21ST, 1968
7. Date Started.....
Completed.....
8. Drill Crew Man Hrs.....
9. Working Days
Drilling.....
Other.....

10. MATERIAL IN WELL			GAGE NO.	WALL THICK-NESS IN.	MATERIAL	TYPE	NO.
	LENGTH FT. IN.	DIA. IN.					
Screen	<u>20' 0"</u>	<u>12"</u>	<u>—</u>	<u>—</u>	<u>STAINLESS STEEL</u>	<u>Shutter Keystone</u>	<u>Openings</u>
Inner Casing	<u>28' 0"</u>	<u>12"</u>	<u>—</u>	<u>—</u>	<u>STEEL</u>	<u>Welded Screwed</u>	
Outer Casing	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>Welded Screwed</u>	

11. GRAVEL
Size #3 & #4 MIX
Tons 8

12. SEALING CASING
Puddled Clay (Yes)
With Bags Bentonite Added
or
With Bags Cement
Seal Material Placed in
Well With.....
Bottom of Well Screen
Sealed With STEEL PLATE

13. WELL DIMENSIONS
A. Total Depth 48' 0"
(From Top of Inner Casing to Bottom of Well)
B. Height of Inner Casing 6"
(Above Ground Level)
C. Distance to Top of Gravel 20' 0"
(From Ground Level)
D. Diameter of Drill Hole 30"

Comments

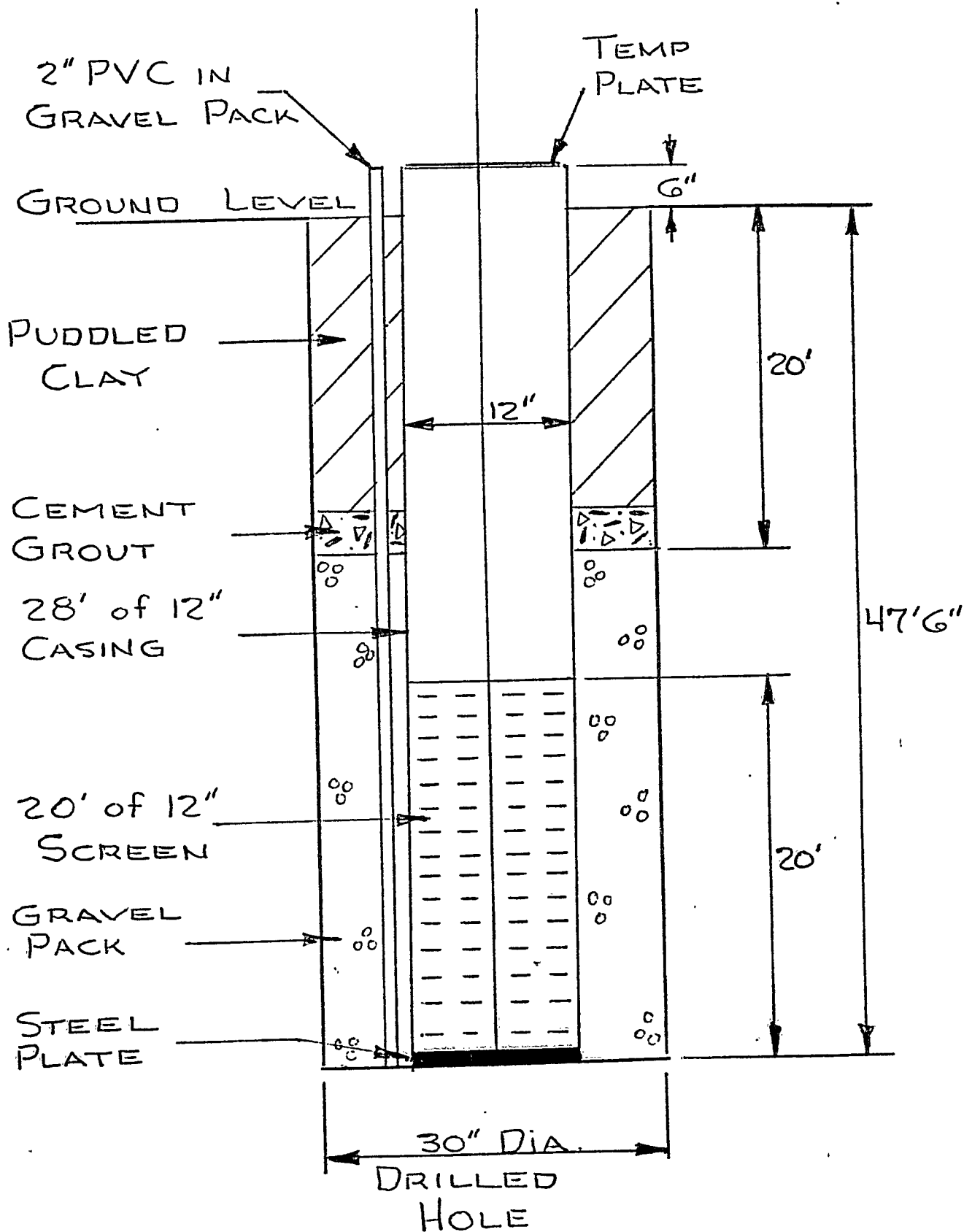
LOG OF WELL

Formation

11649

[illegible]

CONSTRUCTION OF WELL



EST

pump

Permanent pump

6 in 8 Bowl 5 Stages

Length of column 40 Ft.

Length of Bowl 5 Ft.

Length of suction Ft.

VE .5'

B. Measured water level 11'0" Ft. from top of 12 In.

dia. casing which is 6" Ft. above ground.

ORIFICE

4 x 3

C. Length of airline Ft. from top of casing.

TIME	INCHES ORIFICE MANOMETER	GPM	ALT. GAGE READING	WATER LEVEL	DRAW DOWN
1:00 PM		0		11'0"	0
1:01	1	201	= 26.87 $\frac{ft^3}{m}$	15'5"	4'5" 4.42
1:03	3	201		15'9 1/4"	4'9 1/4" 4.77
1:10	10	201		15'11 3/4"	4'11 3/4" 4.98
1:20	20	201		16' 1/2"	5' 1/2" 5.04
1:50	50	201		16' 1"	5' 1" 5.08
9:00 PM	60	201		16' 1"	5' 1" 5.08
PUMP TURNED OFF AT 9:00 PM					
RECOVERY					
9:01 PM	1	0		12' 1/2"	1.12
9:03	3	0		11'9"	.75
9:05	5	0		11'4 1/4"	.35
9:30	30	0		11'0"	0

15. Permanent Pump No. installed by

Layne

Permanent air line length Ft. Date

Month

Day

Year

PUMPING TEST

Daugherty Co. RWD-1
Lawrence Kansas

WELL NO. *Three*
 TEST HOLE NO. *1-11*

DATE *Sept 11 1968*

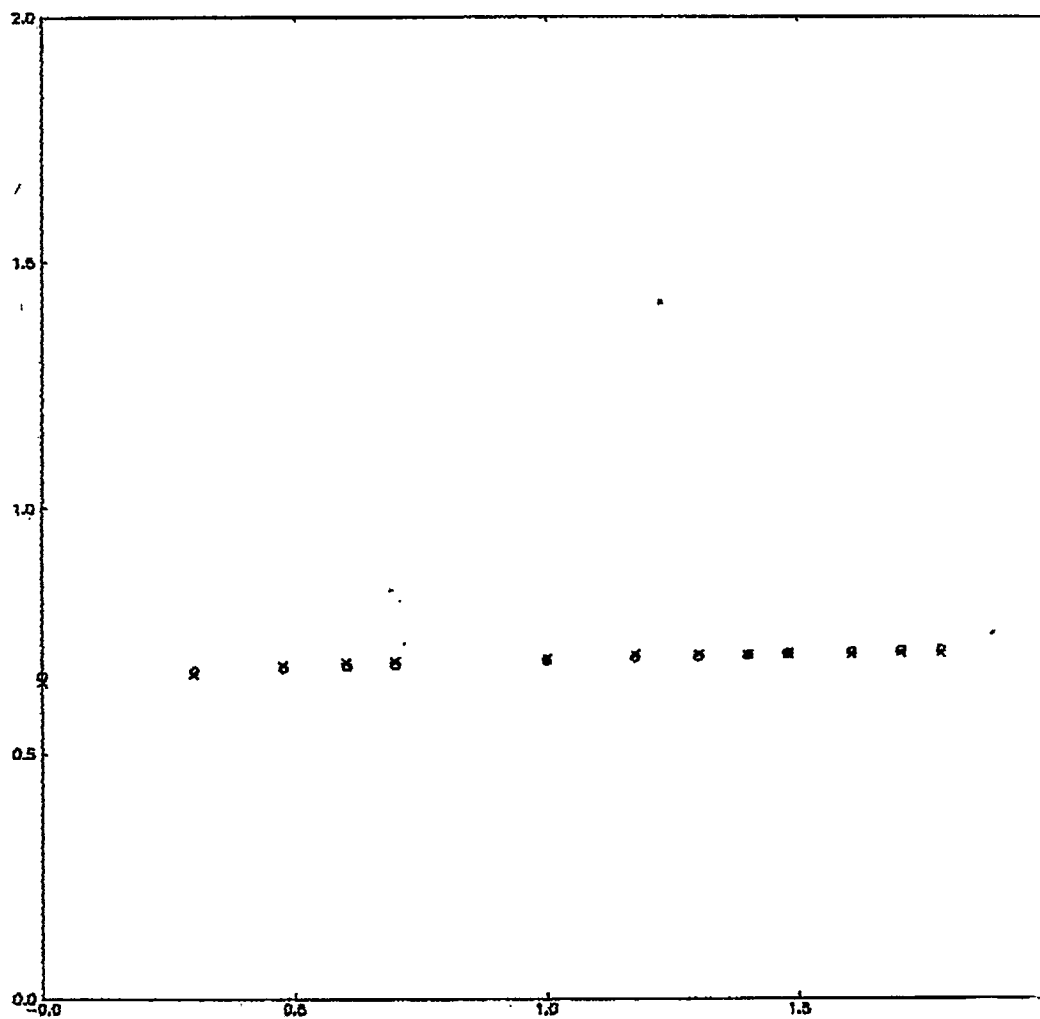
4 X *3* ORIFICE
0 INCH ON TAPE IS *11' 0"* FT. TO BOTTOM OF ELECTRIC PROBE
 MEASURED TO TOP OF *12* INCH CASING *6* FEET ABOVE GROUND LEVEL

DAY	TIME	TAPE READING	DEPTH TO WATER	D.D.	INCHES ON ORIFICE	GPM
9-17-68	1:00 pm	0' 0"	11' 0"		0	0
	:01	4' 3"	15' 3"	4.47	23"	201
	:02	4' 7 3/4"	15' 7 3/4"	4.61	23"	201
	:03	4' 9 1/4"	15' 9 1/4"	4.77	23"	201
	:04	4' 10"	15' 10"	4.83	23"	201
	:05	4' 10 1/2"	15' 10 1/2"	4.875	23"	201
	:10	4' 11 3/4"	15' 11 3/4"	4.93	23"	201
	:15	5' 1/4"	16' 1/4"	5.07	23"	201
	:20	5' 1/2"	16' 1/2"	5.04	23"	201
	:25	5' 1/2"	16' 1/2"	5.04	23"	201
	:30	5' 3/4"	16' 3/4"	5.06	23"	201
	:40	5' 3/4"	16' 3/4"	5.06	23"	201
	:50	5' 1"	16' 1"	5.08	23"	201
	2:00 pm	5' 1"	16' 1"	5.08	23"	201
	:01 2:0070	5' 1"	16' 1"		23"	201
	:02 2:0090	5' 1"	16' 1"		23"	201
	:03 2:00150	5' 1"	16' 1"		23"	201
	:04 2:00180	5' 1"	16' 1"		23"	201
	:05 2:00210	5' 1"	16' 1"		23"	201
	:10 2:00240	5' 1"	16' 1"		23"	201
	:15 2:00270	5' 1"	16' 1"		23"	201
	:20 2:00300	5' 1"	16' 1"		23"	201
	:25 2:00330	5' 1"	16' 1"		23"	201
	:30 2:00360	5' 1"	16' 1"		23"	201
	:40 2:00400	5' 1"	16' 1"		23"	201
	:50 2:00430	5' 1"	16' 1"		23"	201
	2:30 4:05	5' 1"	16' 1"		23"	201
4/11	9:00 am	1' 1 1/2"	12' 1 1/2"	7.042		
	:01	9"	11' 9"	6.66		
	:02	6' 4"	11' 6 1/4"	6.43		
	:03	5' 1/2"	11' 5"	6.33		
	:04	4' 1/4"	11' 4 1/4"	6.2		
	:05	4' 3/4"	11' 3 3/4"	6.1		
	:10	1' 1/4"	11' 1 1/4"	5.02		
	:15 9:30	0' 2"	11' 0"	5.92		
	:25					
	:30					
	:40					
	:50					

Re 60010

DATE 05/21/85 TIME 13:14:06 PLOT# 1 PATH= :SI1:PLOT:4K:LOGPLOT.DOUG.PLOT

* LOGPLOT.DOUGLAS.RWD
* PLOT NO. 1
DATE 05/21/85 TIME 11:07:12



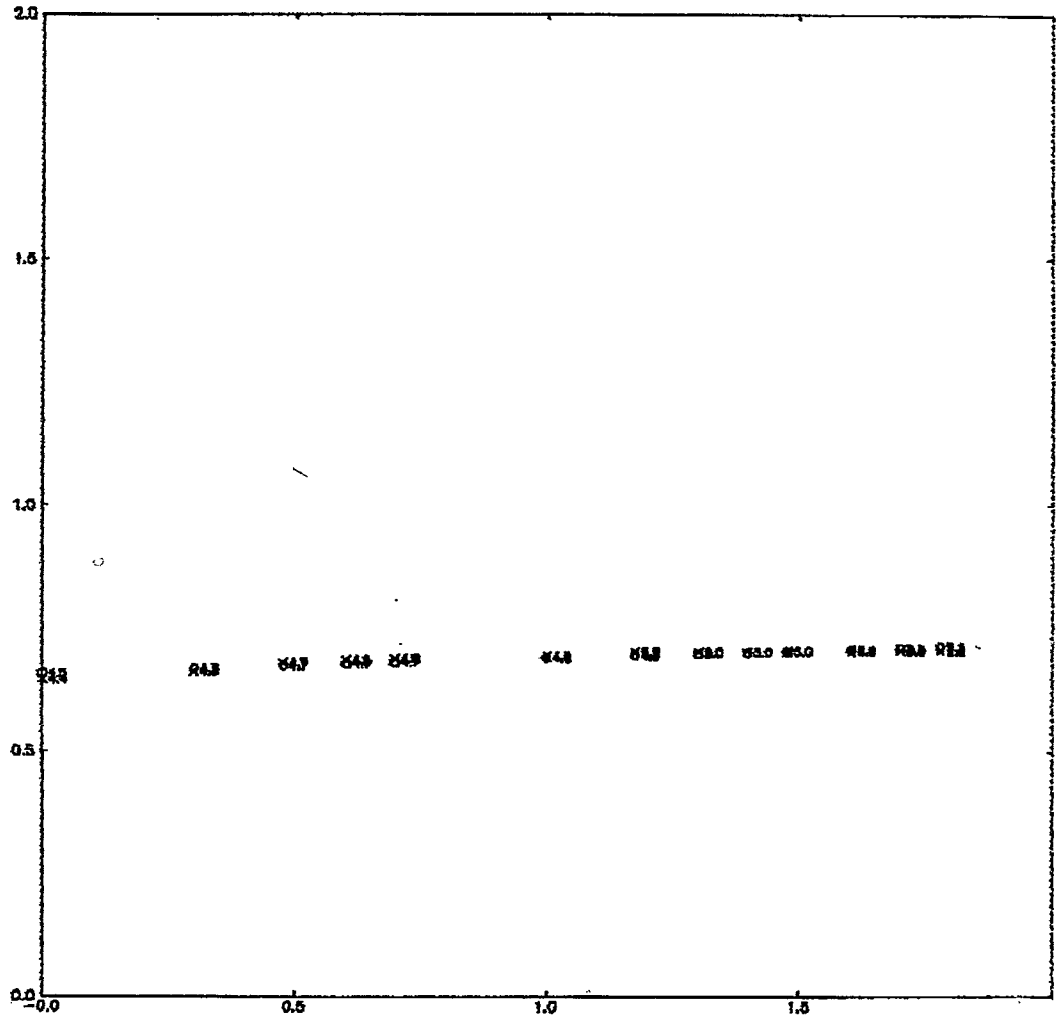
DOUG, C11
(.5')

DATE 05/21/85 TIME 13:16:26 PLOT# 1 PATH= :SI1:PLOT:WK:LABEL.DOUG.PLOT

* LABEL.DOUGLAS.RWD
PLOT NO. 1

TIME 11:08:43

DATE 05/21/85



DOUG, CL1
(15')

COUNTY

DOUGLAS

LOCATION

13-20E-9²

DATE

July 1972

PERFORMED BY WAYNE-WESTERN FOR the City of Baldwin

DISCHARGE 221 gpm

LENGTH OF TEST 480 min 20 min recovery

OF OBSERVATION WELLS 1

DISTANCE(S) TO PUMPING WELL .5'?, 70'

WATER LEVEL = 16.2'

AQUIFER TYPE Alluvial (between ^{the} Kansas and Wakarusa Rivers)

DEPTH OF TEST WELL 75'

SCREEN 5' of screen

COMMENTS There was a tremendous well loss in the pumped well. The drawdown is reduced to hundredths of a foot after 25 minutes in the observation well. The Storage value is low. The discharge rate seems low for the Kansas river alluvium.

COMPUTER ANALYSIS

METHOD	T (gpd/ft)	S	RMS error	r
Theis	211,870	7.4×10^{-7}	.12	70'



TEST HOLE REPORT

*Layne-Western Company, Inc.*Contract Name City of BaldwinJob No. KC-898-NDate 6-27-72City BaldwinState KansasDriller O.J. Harper

TEST HOLE

No. 2-W-72Test Hole Location 70' S. of No. 2-72, 30' W. of Center Line Of N.S. Road

Distance and Direction from Permanent Landmark or Previous Test Hole

TEST LOG

FROM	TO	MARSH FUNNEL VISCOSITY SECONDS	MUD PIT LOSS INCHES	Static Water Level <u>16.2'</u> Measured <u>1/2</u> Hours After Completion
				FORMATION <u>Pumping 6" Well</u>
0'0"	2'0"			Topsoil
2'0"	10'0"			Gray & brown silty clay
10'0"	13'0"			Gray & brown, sandy silt, soft
13'0"	28'0"			Gray, coarse to medium, trace of fine sand and gravel
28'0"	33'0"			Gray, silty clay, medium
33'0"	44'0"			Gray, medium to coarse, trace of fine sand and gravel
44'0"	44'6"			Gray, clay
44'6"	46'0"			Gray-brown, medium to coarse, trace of fine sand and gravel
46'0"	50'0"	45	2"	Gray-brown, coarse to medium, trace of fine sand and gravel
50'0"	55'0"	45	3"	Gray-brown, medium to coarse, trace of fine sand and gravel
55'0"	60'0"	45	4"	Gray-brown, coarse to medium, trace of sand and gravel, boulders
60'0"	65'0"	55	3"	Same
65'0"	71'6"	55	4"	Same
71'6"	72'0"			Gray, broken limestone
72'0"	75'0"			Black, shale

75'0" Total Depth

NOTES: Size of Pit 5'0" X 3'6" X 4'0"

DEEP

Set 70' of 6" Casing (5' Screen) Pumped 8 Hours At 221 GPM

43'0" $\pm$ PWL.



TEST HOLE REPORT

*Layne-Western Company, Inc.*Contract Name City of BaldwinJob No. KC - 898 - N Date 6-23-72City Baldwin State Kansas

TEST HOLE

No. 2-72Driller O.J. HarperTest Hole Location 85' S. of Square Mark On Bridge Rail & 33' W. of Center Line of
Distance and Direction from Permanent Landmark or Previous Test Hole N.S. Road

TEST LOG

FROM	TO	MARSH FUNNEL VISCOSITY SECONDS	MUD PIT LOSS INCHES	Static Water Level <u>15.0'</u> Measured <u>1/2</u> Hours After Completion Pumping
				FORMATION
0'0"	2'0"			Topsoil
2'0"	4'0"			Brown, silty clay, stiff
4'0"	11'0"			Gray, silty clay, stiff
11'0"	13'0"			Brown, medium to coarse, trace of fine sand and gravel
13'0"	25'0"			Gray, coarse to medium, trace of fine sand & gravel
25'0"	34'0"			Gray, silty clay,
34'0"	40'0"			Gray, medium to coarse, trace of fine sand, trace of gravel
40'0"	43'0"			Same
43'0"	43'6"			Gray, clay
43'6"	45'0"			Gray-brown, coarse to medium, trace of fine sand and gravel
45'0"	50'0"	45	2"	Gray-brown, medium to coarse, little fine sand and gravel
50'0"	56'0"	45	1"	Same
56'0"	60'0"	55	2"	Gray-brown, coarse to medium, trace of fine sand, gravel and boulders
60'0"	69'0"	55	7"	Same
69'0"	70'0"			Gray, limestone, solid

70'0" Total Depth

NOTES: Size of Pit _____ X _____ Portable _____ X _____

DEEP

Set 68' of 2" PVC, Pumped 1/2 Hour At 60 GPM For Water Sample.

Ran Electric Log.

RAYNE 500 AQUIFER

Distance from T. W. to Pz.

Depth to static water

Test Well

15
16.20'

Run Pz

Piezometer 1.
70'0"

Piezometer 2.

15.60'

Time of Day	Elapsed Time In Minutes	Test Well Water Level	Drawdown	Piezometer Water Level	27.5" on 4" x 3" Orifice Remarks
1 P.M.	0	***	***	***	
1:01	1	41.90'	25.7'	16.40'	221 gpm = 29.54 f/m
1:02	2	42.20'	1.2	16.70'	221 gpm
1:03	3	42.30'		16.70'	221 gpm
1:04	4	42.35'	1.4	16.90'	221 gpm
1:05	5	42.38'		16.90'	221 gpm
1:07	7	42.40'		16.90'	221 gpm
1:09	9	42.60'	1.5	17.00'	221 gpm
1:11	11	42.65'		17.00'	221 gpm
1:15	15	42.65'	1.6	17.10'	221 gpm
1:20	20	42.67'		17.10'	221 gpm
1:25	25	42.80'		17.10'	221 gpm
1:30	30	42.88'	1.64	17.14'	221 gpm
1:35	35	42.89'	1.65	17.15'	221 gpm
1:40	40	42.90'		17.15'	221 gpm
1:45	45	42.90'		17.15'	221 gpm
1:50	50	42.91'	1.66	17.16'	221 gpm
2:00PM	60	42.91'		17.16'	221 gpm
2:10	70	42.92'		17.16'	221 gpm
2:20	80	42.93'		17.16'	221 gpm
2:30	90	42.95'	1.67	17.17'	221 gpm
2:40	100	42.97'	1.68	17.18'	221 gpm
3:00PM	120	42.98'		17.18'	221 gpm
3:30	150	42.98'		17.18'	221 gpm
4:00PM	180	43.00'		17.18'	221 gpm
4:30	210	43.01'	1.69	17.19'	221 gpm
5:00PM	240	43.03'	1.7	17.20'	221 gpm
5:30	270	43.04'	1.71	17.21'	221 gpm
6:00PM	300	43.05'		17.21'	221 gpm
6:30	330	43.06'	1.72	17.22'	221 gpm
7:00PM	360	43.05'		17.22'	221 gpm
7:30	390	43.04'		17.22'	221 gpm
8:00PM	420	43.04'		17.21'	221 gpm
8:30	450	43.04'		17.21'	221 gpm
9:00PM	480	43.04'		17.21'	221 gpm
	500				

STOP TEST PUMP AND OBSERVE RECOVERY CANNOT RUN Recovery w/ this DATA

9:05	5	16.60'		15.9'
9:10	10	16.20'		15.6'
9:15	15	16.20'		15.6'
9:20	20	16.20'		15.6'
9:30	30			

CHECK RECORDERS FOR PROPER OPERATION JUST PRIOR TO LEAVING JOB SITE.

***OMIT THESE READINGS . *MEASURE AND RECORD PUMPING RATE AT TIME INDICATED
FROM RECORDER CHARTS TOTAL RECOVERY OCCURRED IN _____ MINUTES

COUNTY DOUGLAS

LOCATION 13-Z1E - SDB

DATE 7-29-74

PERFORMED BY LAYNE-WESTERN FOR THE CITY OF EUDORA

DISCHARGE 459 gpm

LENGTH OF TEST 240 min recovery for 40 min

OF OBSERVATION WELLS none

DISTANCE(S) TO PUMPING WELL .84'

WATER LEVEL = 30'

AQUIFER TYPE ALLUVIAL (Kansas & Wakarusa Rivers)

DEPTH OF TEST WELL 71'

SCREEN 10' of screen probably in CM sand & trace boulders

COMMENTS there was a large initial well loss here. The error is a little high.

COMPUTER ANALYSIS

METHOD	T (gpd/ft)	S	RMS error	r
REC			does not converge	.84'
D-R	116,835	4×10^{-8}	.45	.84'



hony 9/95 #3

WELL INFORMATION

Layne-Western Co. Inc.

1. CONTRACT	City of Eudora	5. Driller	D. B. Bowles
2. City, State	Eudora, Kansas	6. DATE	8/4/74
3. Well No.	5	7. Date Started	7/25/74
	at Test Hole No.	Completed	7/29/74
4. Well Location (attach map)	See General Map	8. Drill Crew Man Hrs	102
	13-21-5 db	9. Working Days	3
		Drilling	8 hours
		Other	94 hours

10. MATERIAL IN WELL			GAGE NO.	WALL THICKNESS IN.	MATERIAL	TYPE	NO.
	LENGTH FT.	DIA. IN.					
Screen	10' 0"	12"			304 stainless steel	Wire-Wound	0.100"
						Shutter Keystone	Openings
Inner Casing	61' 0"	12"		0.375	steel	Welded Screwed	
Outer Casing						Welded Screwed	

11. GRAVEL

Size Builders #25

Tons 14 Tons

12. SEALING CASING

Puddled Clay ☒ Yes (No)

With Bags Bentonite Added

or 2 Cu. Yds. Grout

With Bags Cement

Seal Material Placed in Well With Tremie

Bottom of Well Screen Sealed With S.S. Plate

13. WELL DIMENSIONS

A. Total Depth 71'-0"

(From Top of Inner Casing to Bottom of Well)

B. Height of Inner Casing 9'-0"

(Above Ground Level) Final 5'-0"

C. Distance to Top of Gravel 20'-0"

(From Ground Level)

D. Diameter of Drill Hole 30"

Comments

LOG OF WELL

[illegible]

Formation

End

1. *Asperula*
 2. *Asperula*
 3. *Asperula*
 4. *Asperula*
 5. *Asperula*
 6. *Asperula*
 7. *Asperula*
 8. *Asperula*
 9. *Asperula*
 10. *Asperula*

top soil

Brown s. / Hy clay

Gray brown silt, clay

Gray sandy silty cl.

Gray, fine to very fine sand

grad. coarse to medium
sand trace boulders

AQUIFER TEST

DATE

7-29-74

N

WELL NO.

5

JOB NO.

A-124-N

TIME OF DAY	ELAPSED TIME IN MINUTES	TAPE READING	WATER LEVEL BELOW MS PT	DRAWDOWN IN FEET	PUMPING RATE OF TEST WELL
	S.W.L.	30.14	D.P.		
130	0				
131	1	39.65	8.26		
132	2	39.03			459
133	3	39.2	8.9		6.36
134	4	39.57	9.17		
135	5	39.79	9.39		
137	7	40.65	10.25		
139	9	41.1	10.75		459
141	11	41.19	10.79		
145	15	41.43	11.03		
150	20	41.53	11.13	11.13	
155	25	41.64	11.24		
200	30	41.71	11.31		
205	35	41.75	11.45		
210	40	41.83	11.43		
215	45	41.83			
220	50	41.83			459
230	60	41.83			
240	70	41.83			
250	80	41.83			
300	90	41.83			
310	100	41.83			
320	120	41.84	11.44		
400	150	41.84		11.44	459
430	180	41.84			
500	210	41.84		11.44	459
530	240	41.84			
	270				
P.C.	300				
	0	41.84	11.44		
	1	32.73	2.13		
	2	32.53	2.13		
	3	32.27	1.87		
	4	32.09	1.69		
	5	31.98	1.58		
	7	31.8	1.4		
	9	31.64	1.24		
	11	31.54	1.14		
	15	31.4	1.0		
	20	31.3	.9		
	30	31.28	.81		
	36	31.15	.75		
	40	30.97	.57		
	45	6.33			
	50				

LAYNE-WESTERN COMPANY, INC