

COUNTY

LEAVENWORTH

LOCATION

8-22E-13BAA

DATE

7/12/74

PERFORMED BY

LAYNE-WESTERN

FOR

FT. LEAVENWORTH

DISCHARGE

variable,

860 gpm, 1250 gpm, 1750 gpm

LENGTH OF TEST

120 min, - 120 min recovery

OF OBSERVATION WELLS

none

DISTANCE(S) TO PUMPING WELL

1.25'

WATER LEVEL = 9.2'

AQUIFER TYPE

ALLUVIAL (MISSOURI RIVER)

DEPTH OF TEST WELL

93.5'

SCREEN

45' of screen

COMMENTS

The Recovery data seems strange; There is a very large amount of recovery instantly after the pump is shut down. The 'D-R' analysis has a large RMS error and the two methods have large differences in transmissivity values. ^{used}

COMPUTER ANALYSIS

METHOD

T (gpd/ft)

S

RMS
error

r

Theis, VQ

205,299

.001

.366

1.25'

D-R

618,266

—

.555

1.25'

WELL INFORMATION

Layne-Western Co. Inc.

1 pump test @ 400 gpp

$1 + c_2 + w/v_{\text{covery}}$

@ 1750 gpm

1. CONTRACT Ft. Leavenworth
2. City, State Leavenworth,
Kansas
3. Well No. 5 at Test Hole No. 1-69
4. Well Location (~~attach map~~) Just North of
Levee At. South End of Sherman
U.S. Army Airfield (see plans)
5. Drillers David & Bill Bowles
6. DATE 7/14/74
7. Date Started 7/8/74
Completed 7/12/74
8. Drill Crew Man Hrs. 296
9. Working Days
Drilling 45
Other 251

8-22E-13 b9.a

10. MATERIAL IN WELL			GAGE NO.	WALL THICK- NESS IN.	MATERIAL	TYPE	NO.
	LENGTH FT. IN.	DIA. IN.					
Screen	45'-0"	18"	Note: 5'-0" Blank Extension on Bottom of Screen (Sch. 10 S.S. Pipe)	0.500"	304 Stainless Steel	Wire Wound	0.080"
						Openings	
Inner Casing	43'-6"	18"				-	steel
Outer Casing	25'-0"	36"	-	0.582"	steel	Welded	

11. GRAVEL

GRAVEL
Size Builders Sand #2 Washed Gravel
Tons 22 1/2

12. SEALING CASING

Puddled Clay ~~(Yes)~~ **(No)**

With Bags Bentonite Added

or

or 4 C.Y.
With Bags Cement GROUT.

Seal Material Placed in
Well With Tremie Pipe

Bottom of Well Screen
Sealed With 3/8" S.S. plate

13. WELL DIMENSIONS

A. Total Depth 93'-6"
(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.....30'-0"
(From Ground Level)

D. Diameter of Drill Hole **30"**

Comments _____

PUMPING TEST

Test pump

12 in TLC Bowl 2 Stages

Permanent pump

Length of column 40 Ft.

Length of Bowl **3'-6"** Ft.

Length of suction 10 Ft.

B. Measured water level 9.20 Ft. from top of 18 In.

dia. casing which is 2.00 Ft. above ground.

Used Electric Tape Line To Measure
C. ~~Length of airline~~ Et. from top of casing.

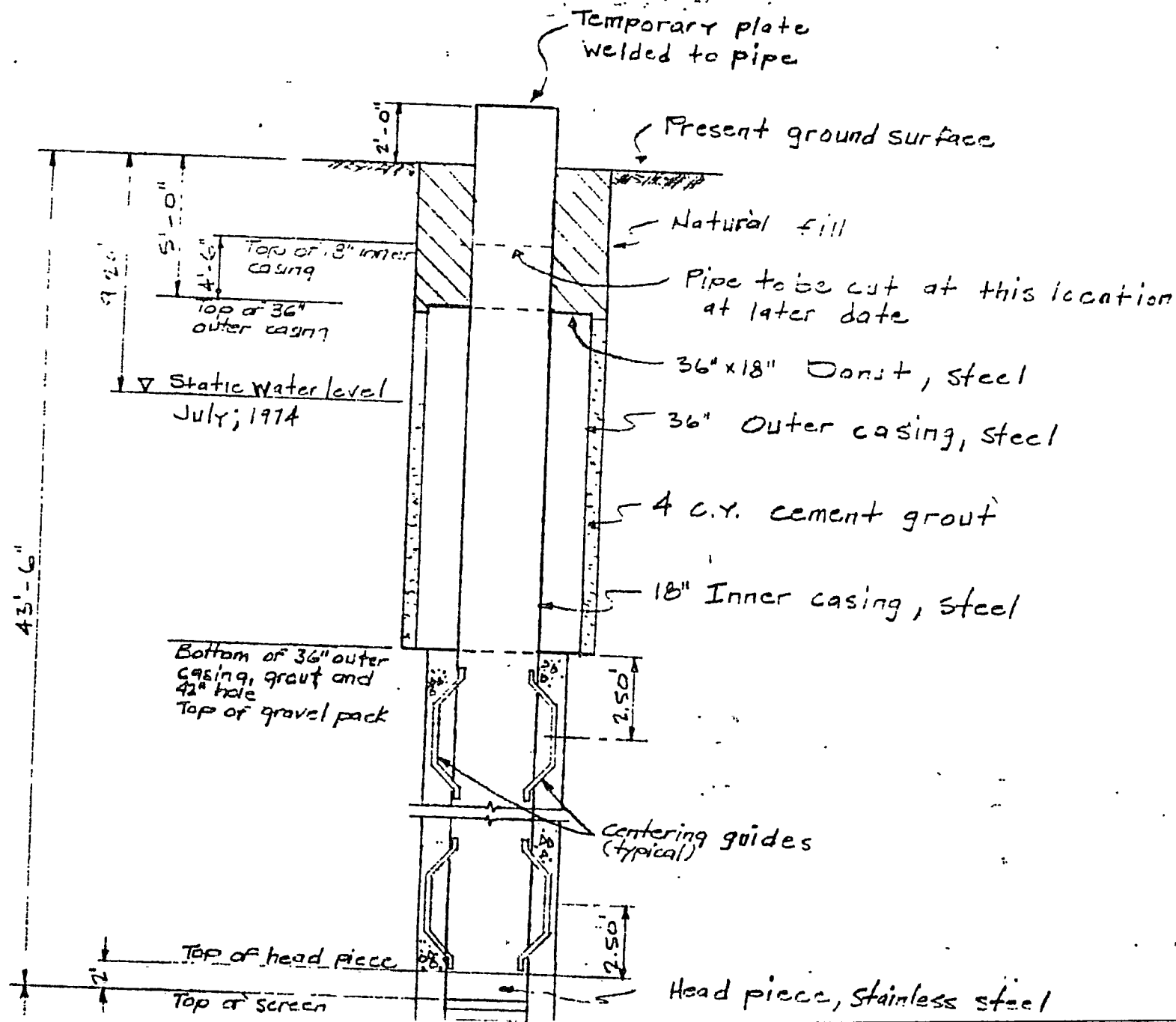
ORIFICE

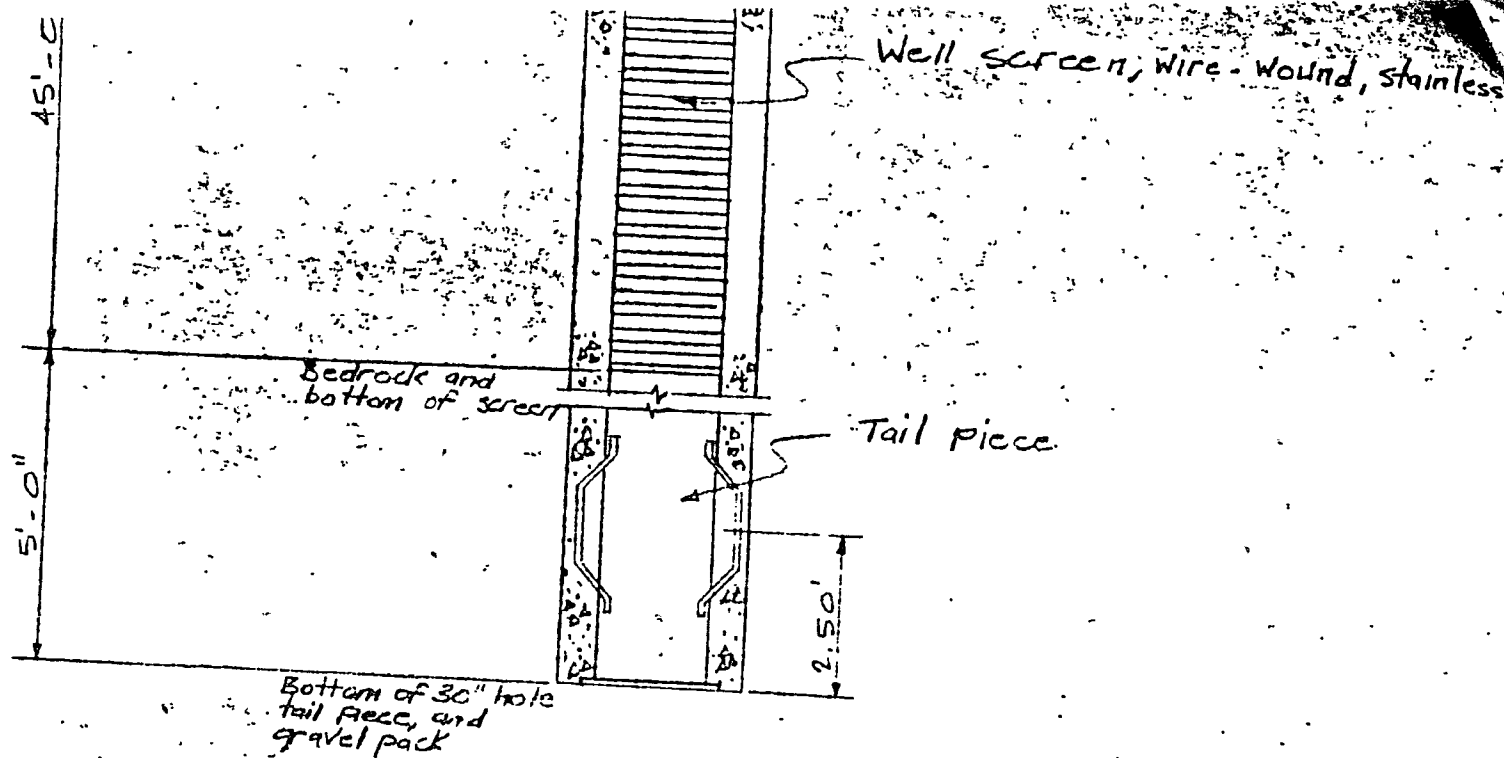
12" x 9"

[illegible]

15. Permanent Pump No. Not Yet installed by

Permanent air line length Ft. Date.....
Month Day Year





				FT. LEAVENWORTH WATER SYSTEM	
				WELL No. 5	
				FT. LEAVENWORTH, KANSAS	
NO.	WAS	BY	DATE	DRN	DRAWING NUMBER
LAYNE-WESTERN COMPANY				CKD	B-985-N

PROPERTY OF LAYNE-WESTERN COMPANY—To Be Returned Upon Request

7/11/74

JOB NO. A-985-N

[illegible]

AQUIFER TEST

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Ft. Leavenworth

DATE 7/11/74

LOCATION Leavenworth, Kansas

WELL NO. 5

JOB NO. A-985-N

TIME OF DAY	ELAPSED TIME IN MINUTES	TAPE READING FT.	WATER LEVEL BELOW MS PT	DRAWDOWN IN FEET	PUMPING RATE OF TEST WELL (
7:00 p.m.	S.W.L.	9.20			12.50
	240 0	19.34		10.14	
	241 1	19.42		10.22	
	242 2	19.47		10.27	
	3	19.50		10.30	
	4	19.52		10.32	
	5	19.55		10.35	
	7	19.56		10.36	
	249 9	19.57		10.37	
	251 11	19.58		10.38	
	15	19.61		10.41	
	260 20	19.64		10.44	
	25	19.69		10.49	
	270 30	19.71		10.51	
	35	19.75		10.55	
	286 40	19.76		10.56	
	45	19.77		10.57	12.50
	290 50	19.78		10.58	12.50
	300 60	19.81		10.61	12.50
	310 70	19.83		10.63	12.50
	80	19.85		10.65	
	330 90	19.87		10.67	12.50
	340 100	19.88		10.68	
	360 120	19.90		10.70	
	390 150	19.90		10.70	12.50
	420 180	19.90		10.70	
	450 210	19.94		10.74	12.50
	480 240	19.99		10.79	12.50
	510 270				
	540 300				
HOURLY	NOTES: 1) Middle four (4) hours of 12-hour pumping test of 1250 gpm flow rate. (specified rate was 1200 gpm)				
	2) Static water level measured as 9.20' from top of casing which was 2.00' above natural ground surface during test.				
	3) Specific capacity after 4 hours = $1250/10.79 = 115.8$				
	$Q = 167 \text{ ft}^3/\text{hr}$				

JOB NO. A-985-N

LAYNE-WESTERN COMPANY INC

7/12/74 19, 20

DATE _____

7/12/74

19, 20

EDUCATION Leavenworth, Kansas

WELL NO. 5

JOB NO. A-985-N

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