WATER WELL RECORD Form WWC-5 KSA 82a-1212

1 LOCATION OF WATER WELL	Fraction	Section Number	Township Number	Range Number
County: Ellis	NE ¼ SW ¼ NE ¼	19	T 13 S	R 18 ~~E~~/W

Distance and direction from nearest town or city? 1/2 Mile NW of Hays

Street address of well if located within city?

2 WATER WELL OWNER: Travenol Laboratories Inc

RR#, St. Address, Box # : Interstate 70 & Bird Rd.

City, State, ZIP Code : Hays, Kansas 67601

Board of Agriculture, Division of Water Resources Application Number:

3 DEPTH OF COMPLETED WELL 1076 ft. Bore Hole Diameter 12 1/4 in. to 208 ft., and 7 7/8 in. to 1079 ft.

Well Water to be used as: 1 Domestic 2 Irrigation 3 Feedlot 4 Industrial 5 Public water supply 6 Oil field water supply 7 Lawn and garden only 8 Air conditioning 9 Dewatering 10 Observation well 11 Injection well 12 Other (Specify below)

Well's static water level 49 ft. below land surface measured on August month 28 day 1980 year

Pump Test Data: Well water was ft. after hours pumping gpm

Est. Yield gpm: Well water was ft. after hours pumping gpm

4 TYPE OF BLANK CASING USED: 1 Steel 2 PVC 3 RMP (SR) 4 ABS 5 Wrought iron 6 Asbestos-Cement 7 Fiberglass 8 Concrete tile 9 Other (specify below)

Casing Joints: Glued Clamped Welded Threaded

Blank casing dia 8 in. to 207 ft., Dia 4 in. to 1076 ft., Dia in. to ft.

Casing height above land surface [redacted] 44 in., weight 28.55 & 14.98 lbs./ft. Wall thickness or gauge No .322 & .337

TYPE OF SCREEN OR PERFORATION MATERIAL: 1 Steel 2 Brass 3 Stainless steel 4 Galvanized steel 5 Fiberglass 6 Concrete tile 7 PVC 8 RMP (SR) 9 ABS 10 Asbestos-cement 11 Other (specify) 12 None used (open hole)

Screen or Perforation Openings Are: 80' Perforated 1 Continuous slot 2 Louvered shutter 3 Mill slot 4 Key punched 5 Gauzed wrapped 6 Wire wrapped 7 Torch cut 8 Saw cut 9 Drilled holes 10 Other (specify) Gun Perforation 11 None (open hole)

Screen-Perforation Dia 4 in. to 1076 ft., Dia in. to ft., Dia in. to ft.

Screen-Perforated Intervals: From 855 ft. to 867 ft., From 938 ft. to 972 ft.
2 Shots/Ft. From 911 ft. to 919 ft., From 1026 ft. to 1042 ft.
~~Gravel Pack Intervals~~: From ft. to ft., From 1046 ft. to 1056 ft.
From ft. to ft., From ft. to ft.

5 GROUT MATERIAL: 1 Neat cement 2 Cement grout 3 Bentonite 4 Other

Grouted Intervals: From 0 ft. to 208 ft., From 0 ft. to 1079 ft., From ft. to ft.

What is the nearest source of possible contamination:
1 Septic tank 2 Sewer lines 3 Lateral lines 4 Cess pool 5 Seepage pit 6 Pit privy 7 ~~Sewage~~ lagoon 8 Feed yard 9 Livestock pens 10 Fuel storage 11 Fertilizer storage 12 Insecticide storage 13 Watertight sewer lines 14 Abandoned water well 15 Oil well/Gas well 16 Other (specify below)

Direction from well Northwest How many feet 300'? Water Well Disinfected? Yes No

Was a chemical/bacteriological sample submitted to Department? Yes No If yes, date sample was submitted month day year: Pump Installed? Yes No

If Yes: Pump Manufacturer's name Model No. HP Volts

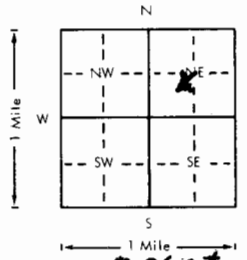
Depth of Pump Intake ft. Pumps Capacity rated at gal./min.

Type of pump: 1 Submersible 2 Turbine 3 Jet 4 Centrifugal 5 Reciprocating 6 Other

6 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed (2) reconstructed, or (3) plugged under my jurisdiction and was completed on August month 28 day 1980 year and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 102

This Water Well Record was completed on September month 11 day 1980 year under the business name of Layne Western Co Inc. by (signature) [signature]

7 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:



ELEVATION: 2067 ±

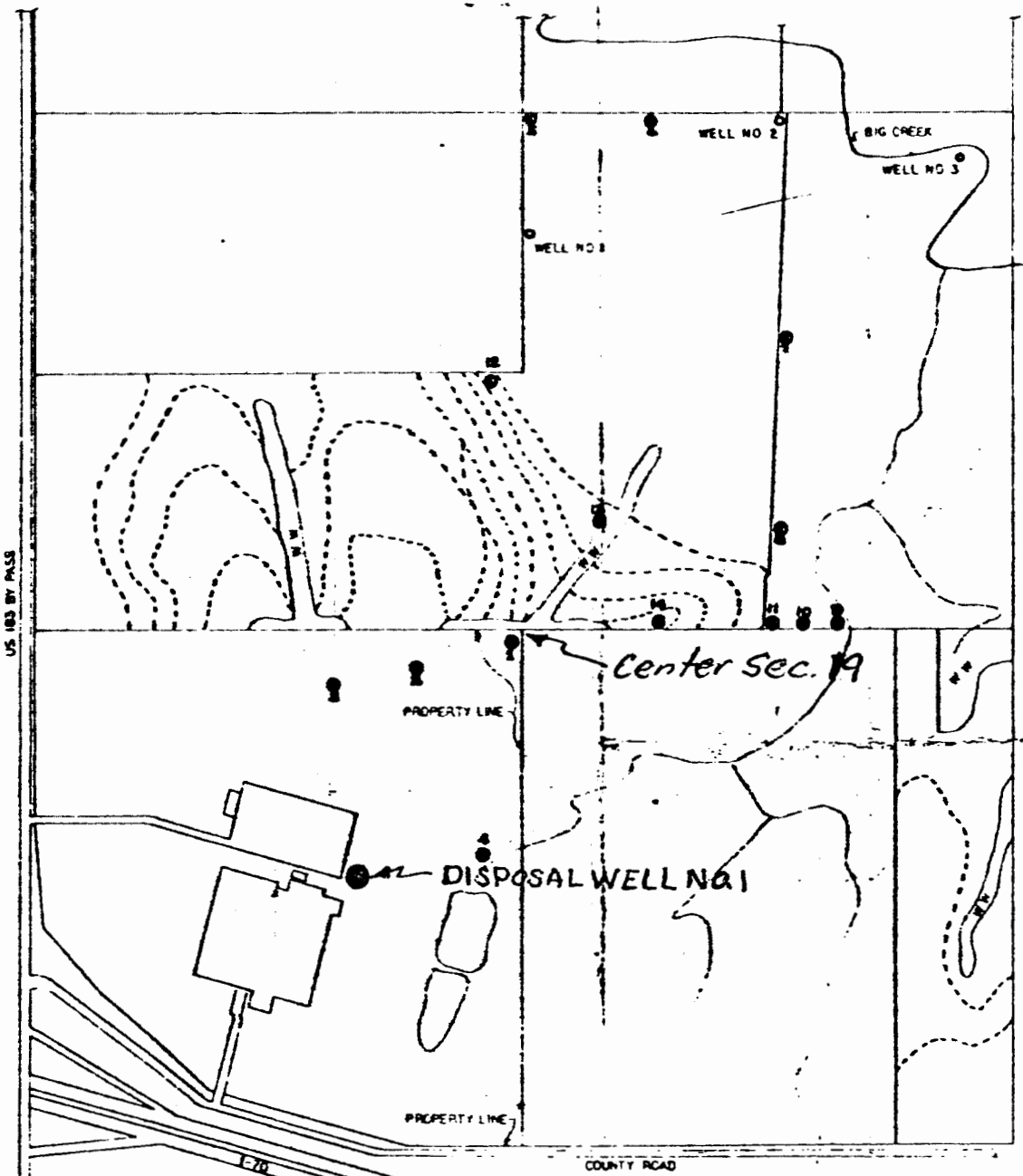
FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	4	Silty Top Soil			
4	20	Chalky Shale			
20	160	Blue Hills Fm.			
160	234	Fairport Fm.			
234	312	Greenhorn Fm.			
312	348	Greneros Fm.			
348	637	Dakota Fm			
637	664	Kiowa Fm			
664	722	Cheyenne Fm.			
722	1079	Cedar Hills Fm.			

Log by Don Butcher Geologist, K.S.D.H&E.

Depth(s) Groundwater Encountered 1 49 ft. 2 ft. 3 ft. 4 ft. (Use a second sheet if needed)

INSTRUCTIONS: Use typewriter or ball point pen, *please press firmly* and *PRINT* clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Division of Environment, Water Well Contractors, Topeka, KS 66620. Send one to WATER WELL OWNER and retain one for your records.

OFFICE USE ONLY T 13 R 18 E/W SEC. 19 NE ¼ SW ¼ NE ¼



State

N

LEGEND

WW WATER WAYS
--- TERRACES
X TEST HOLES

NE 1/4, SW 1/4, NE 1/4
Sec 19
T13S, R18W
Ellis, County
Kansas

ITEM	PART NO.	QTY.	DESCRIPTION	MATERIAL

TOLERANCES
UNLESS OTHERWISE SPECIFIED
FRACTIONAL DIMENSIONS ± 1/64
DECIMAL DIMENSIONS ± .005
ANGULAR DIMENSIONS ± 1/2 DEG
DO NOT SCALE DRAWING
NEXT ASSY

REV	DESCRIPTION	DATE	BY

SCALE 5 78 = 1/2 MILE
DWN R B 6/18 76
CHK'D
APP'D
DATE
REQ
SHEET OF

TRAVENOL LABORATORIES, INC.

LOCATION
DISPOSAL WELL NO. 1

DWG NO.

State

WELL INFORMATION

Layne-Western Co. Inc.

1. CONTRACT Travenol Div., Baxter Labs Brine Disposal Well
2. City, State Hays, Kansas
3. Well No. 1 Disposal at Test Hole No.
4. Well Location (attach map) NE¼, SW¼, NE¼, Sec. 19, T13S, R18W, Ellis County, Kansas
5. Driller H.Rushton/J.Allen
6. DATE
7. Date Started 7/28/80
   Completed 8/28/80
8. Drill Crew Man Hrs.
9. Working Days
   Drilling
   Other

10. MATERIAL IN WELL

	LENGTH FT.	LENGTH IN.	DIA. IN.	GAGE NO.	WALL THICKNESS IN.	MATERIAL	TYPE	NO.
Perforation ~~Screen~~	80					Welex-Hornet Jet Perforations	2 Shots/Ft. Shutter Keystone	160 Openings
Inner Casing	1076		4½		.337	Steel	~~Welded~~ Screwed	
Outer Casing	207		8-5/8		.322	Steel	~~Welded~~ Screwed	

11. GRAVEL

Size

Tons

12. SEALING CASING

Puddled Clay (Yes) (No)

With ..... Bags Bentonite Added

or

With 375 Bags Cement

Seal Material Placed in Well With

Bottom of Well ~~Screen~~ Sealed With Cement from 1072'4" - 1079' From Ground Level

13. WELL DIMENSIONS

A. Total Depth 1076'
(From Top of Inner Casing to Bottom of Well)

B. Height of Inner Casing 3' 8"
(Above Ground Level)

C. Distance to Top of Gravel
(From Ground Level)

D. Diameter of Drill Hole 12¼ & 7-7/8

Comments Drilled with CF15 Rotary

LW-39 Set 845' of 1½" Schedule 40 steel pipe with PVC Lining for injection tube, with Arrow Oil Tools packer & Don R. Hinderliter tubing head.

14. PUMPING TEST

A.

Test pump

.....in.....Bowl.....Stages

Permanent pump

Length of column .....Ft.

Length of Bowl .....Ft.

Length of suction .....Ft.

Top of 1½" Injection Pipe at 5'4" above ground.

B. Measured water level 52' 8" ~~XX~~ from top of 4½ In. dia. casing which is 3'8" ~~Ft~~. above ground.

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

ORIFICE

.....x.....

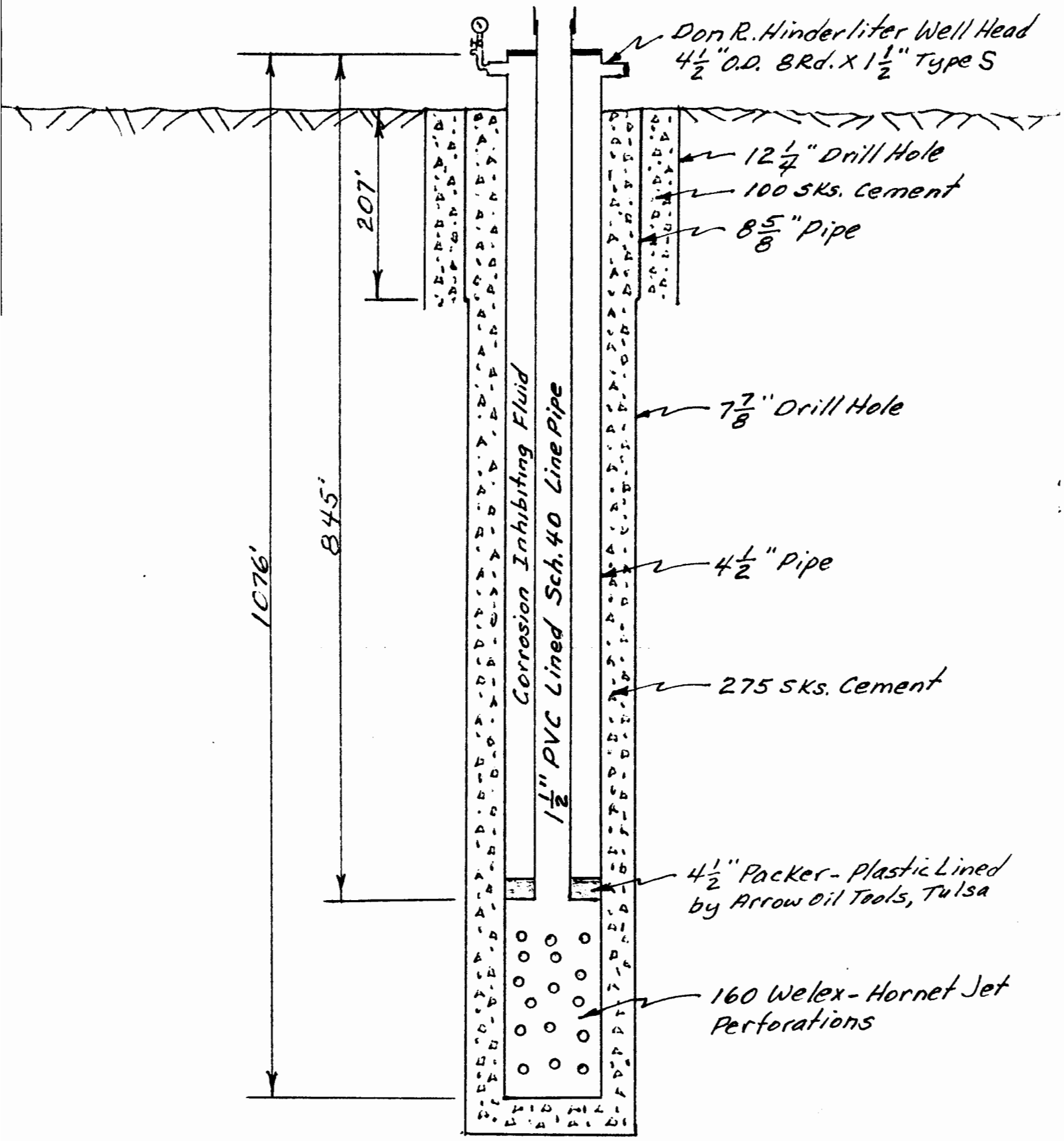
.....x.....

TIME	INCHES ORIFICE MANOMETER	GPM	ALT. GAGE READING	WATER LEVEL	DRAW DOWN
		0			0
Put 1500 gallons of fresh water in well after swabbing. Well took 1500 gallons under gravity flow in 25 minutes. Approximately 60 GPM.					
Filled annulus space between 4½" and 1½" with corrosion inhibiting fluid furnished by Halliburton Company and pressured up to 30 psi. No fluid loss over night					

15. Permanent ..... Pump No. ..... installed by .....
Layne

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

CONSTRUCTION OF WELL



LOG OF WELL

Ft.	In.	to	Ft.	In.	Formation
					Log by Don Butcher, Geologist
0			4		Silty top soil
4			20		Chalky shale
20			160		Blue hills formation
160			234		Fairport formation
234			312		Greenhorn formation
312			348		Graneros formation
348			637		Dakota formation
637			664		Kiowa formation
664			722		Cheyenne Formation
722			1079		Cedar hills formation