

PART 592 - WELL - 642

§KS592.00 Design Criteria

The suitability of the well site and the type of well installed shall be based on detailed geologic investigations, including test well drilling; on ground water assessment studies made by local, state, or federal agencies; or on reliable local experience. Requirements for well drilling, development, and installation as outlined in the Kansas Standard and Specifications for Well - 642, and Chapter 12 of the Engineering Field Manual (EFM) will be strictly followed. This also applies to regulations and procedures as prescribed by the Kansas Department of Health and Environment for well development.

§KS592.01 Test Holes

Unless the well is in a proven area of uniform waterbearing materials, a test hole should be drilled at the well site. It should be accurately logged to determine the location, depth, and grain size of the aquifer. In some cases it will be desirable to run a pumping test to determine the aquifer characteristics.

§KS592.02 Well Diameter

The diameter of the well should be adequate to meet the yield capacity of the waterbearing aquifer and to permit the installation of a pump to deliver the needed amount of water for the projected pumping head required.

§KS592.03 Casing and Materials

Casing and filter materials shall meet the requirements outlined in §KS592.00.

§KS592.04 Installation

The well shall be constructed by a well driller or contractor who is properly licensed by the Kansas Department of Health and Environment. The well will be drilled and developed and materials will be installed according to the criteria listed in §KS592.00.

§KS592.05 Documentation for Installation

Prior to installation, Form KS-ENG-10 will be filled out as follows:

- (a) Practice
- (b) Owner's name and identification number
- (c) Legal description and county
- (d) Table of quantities - list materials and amounts planned for use, applicable ASTM's, etc.

PART 592 - WELL - 642

§KS592.05

(e) Location map

(1) Show well location

(2) Show all pertinent items such as underground utilities, fences, power lines, etc.

(f) The SCS representative or the contractor may sign the "Design By" block and date. If signed by an SCS representative, then the contractor's name should be listed immediately under the SCS representative's signature following "Design By". (This will indicate the type of materials and amounts planned for use in the installation and also that they will meet the necessary requirements listed in §KS592.00.)

(g) The district conservationist or the responsible designated technician should sign the "Design Approved By" block and date. This indicates the site is ready for development and is located correctly, the materials to be used are satisfactory, and the contractor may proceed. See §KS592.07.

§KS592.06 Checkout

After the well is installed, the contractor will fill out and complete the following on Form KS-ENG-10:

(a) List the installed materials in the table of quantities

(b) Attach a copy of the completed well log, Form WWC-5, which is furnished by the Kansas Department of Health and Environment. See §KS592.08.

(c) List any applicable comments under the remarks section.

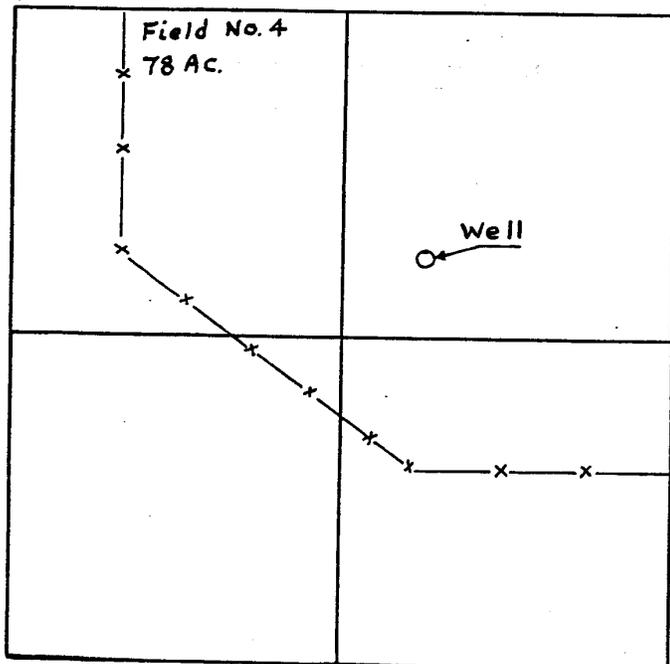
(d) Sign and date the "Checkout By" block with title written in below. (This will indicate the amount of each material installed and that each met the applicable ASTM, standard, or regulation.)

FIELD SHEET Well
 (Practice)

Owner Sample Ranch Ident. No. 435
 Legal Desc. NE⁴SW⁴ Sec. 4 T 32S R 28W County Meade

TABLE OF QUANTITIES

Item	Unit	Design Quan.	Install Quan.
Well casing, 5 in. dia., 200 psi PVC-1120 SDR 21 - ASTM D 2241	Lin. Ft.	220	220
Gravel pack *	Cu. Ft.	62	62
Cement grout *	Cu. Ft.	3	3
* Materials shall meet the requirements of Kansas SCS standard and Specification for Well-642 and the Kansas Department of Health and Environment			



Remarks. See attached well log (Form WWC-5)

John W. Bar 7/13/82
 Design By Contractor Date

Design Checked By _____ Date

Bob R. Wills, D.C. 7/14/82
 Design Approved By _____ Date

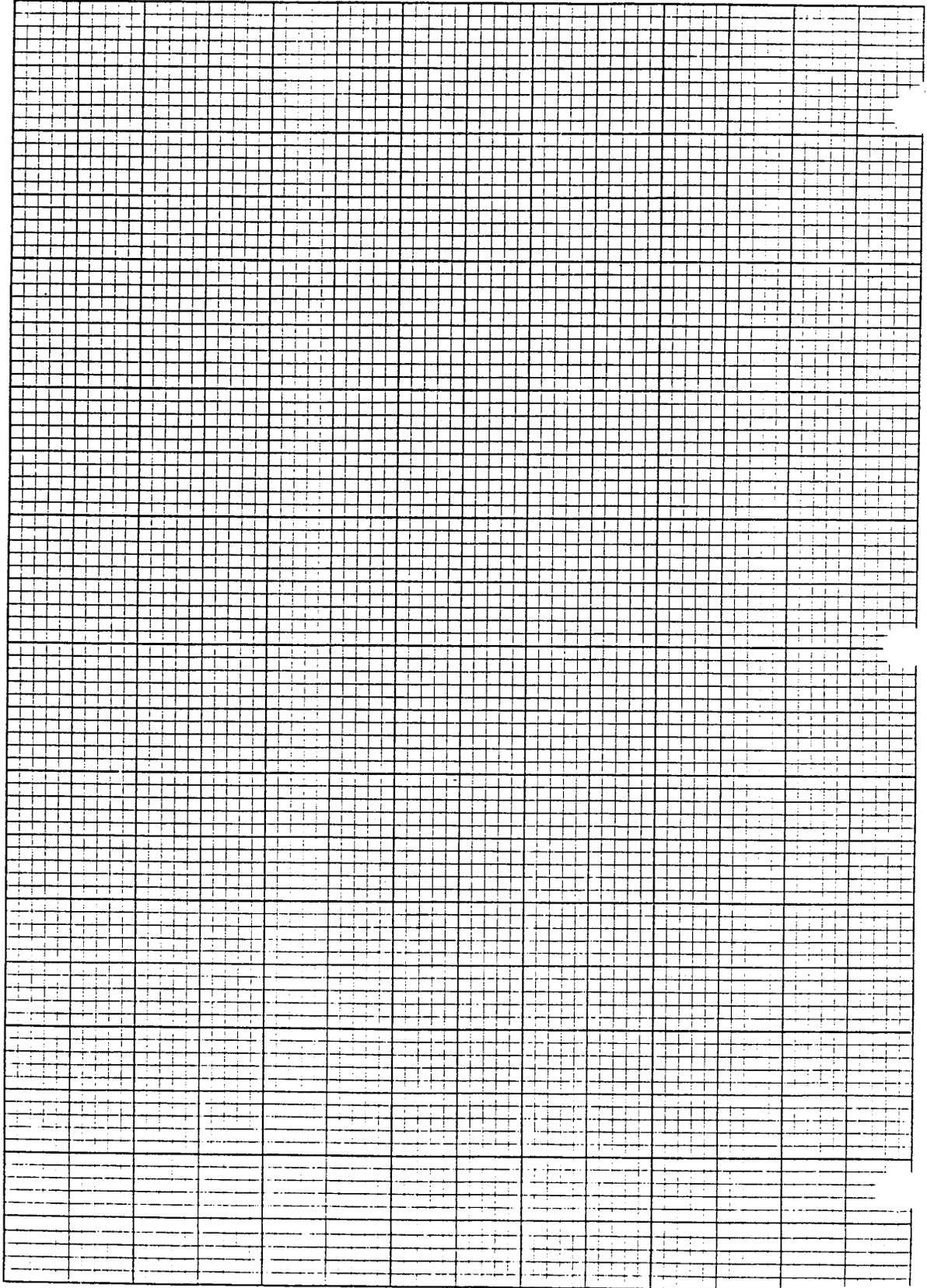
Layout By _____ Date

John W. Bar 7/14/82
 Checkout By Contractor Date

LOCATION MAP
 Scale 1" = 660'
 (KS210-KNKDM, June 1984)

§KS592.07-2

PART 592 - WELL - 642



KS592-4

(KS210-KNKDM, June 1984)

PART 592 - WELL - 642

§KS592.08 Sample Well Log on Form WWC-5

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

LOCATION OF WATER WELL:		Section Number	Township Number	Range Number
County: Meade	Fraction: SW ¼ NE ¼ SW ¼	4	T 32 S	R 28 E/W

Distance and direction from nearest town or city street address of well if located within city?
1 1/2 Mi. East 1/2 Mi. North of Meade, Ks.

WATER WELL OWNER: **Sample Ranch**
 RR#, St. Address, Box #: **Box 101**
 City, State, ZIP Code: **Meade, Ks. 67864**

Board of Agriculture, Division of Water Resources
 Application Number:

LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX: 	DEPTH OF COMPLETED WELL: 220 ft. ELEVATION: _____
	Depth(s) Groundwater Encountered: 1. 75 ft. 2. 176 ft. 3. _____ ft. WELL'S STATIC WATER LEVEL: 75 ft. below land surface measured on (m/d/y) 7/13/82 Pump test data: Well water was 75 ft. after 1 1/2 hours pumping 30 gpm Est. Yield: 50 gpm; Well water was _____ ft. after _____ hours pumping _____ gpm Bore Hole Diameter: 8 7/8 in. to 220 ft. and _____ ft. to _____ 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) _____ Was a chemical/bacteriological sample submitted to Department? Yes _____ No <input checked="" type="checkbox"/> _____; if yes, (m/d/y) sample was submitted _____ Water Well Disinfected? Yes <input checked="" type="checkbox"/> No _____

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) _____
 Blank casing diameter: **5** in. to **180** ft. Dis. _____ in. to _____ ft. Dis. _____ in. to _____ ft. Dis. _____ in. to _____ ft. Dis. _____
 Casing height above land surface: **24** in. weight _____ lb./ft. Wall thickness or gauge No. **SDR 21**

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:
 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) _____ 11 None (open hole) _____

SCREEN-PERFORATED INTERVALS: From **180** ft. to **220** ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.
 GRAVEL PACK INTERVALS: From **15** ft. to **220** ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.

GRAVEL PACK MATERIAL:
 1 Neat cement 2 Cement grout 3 Bentonite 4 Other _____
 Grout Interval: From **Q** ft. to **20** ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.

What is the nearest source of possible contamination:
 1 Septic tank 2 Sewer lines 3 Water-bright sewer lines 4 Lateral lines 5 Cess pool 6 Seepage pit 7 Pit privy 8 Sewage lagoon 9 Feedyard 10 Livestock pens 11 Fuel storage 12 Fertilizer storage 13 Insecticide storage 14 Abandoned water well 15 Oil well/Gas well 16 Other (specify below) _____
 Direction from well? **East** How many feet? **600**

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHOLOGIC LOG
0	3	Topsoil			
3	46	White clay			
46	73	Fine sand			
73	78	Shale			
78	97	Fine sand & gravel			
97	114	White clay			
114	123	Sand			
123	134	Clay & sand			
134	166	Blue clay			
166	176	Clay & sand			
176	214	Sand & gravel			
214	220	Blue clay			

CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (m/d/y) **7/15/82** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. **A.102**. This Water Well Record was completed on (m/d/y) **7/16/82** under the business name of **Bar Drilling Co.** by (signature) **John W. Park**

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks/indenns or circle the correct answers. Send two three copies to Kansas Department of Health and Environment, Division of Environment, Environmental Geology Section, Topeka, KS 66620. Send one to WATER WELL