

Form WWC-5

Division of Water Resources App. No.

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| 1 LOCATION OF WATER WELL: | | Fraction | Section Number | Township No. | Range Number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| County: Republic | | NE ¼ NE ¼ SE ¼ SW ¼ | 8 | T 3 S | R 01 E W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here [] 100' south and 400' west of intersection Liberty St. and Beach St. in Cuba, KS | | | Global Positioning System (GPS) information: Latitude: .39° 48' 07.3"..... (in decimal degrees) Longitude: 097° 27' 13.5"..... (in decimal degrees) Elevation: .1599' Datum: [] WGS 84, [X] NAD 83, [] NAD 27 Collection Method: [X] GPS unit (Make/Model: Garmin) [] Digital Map/Photo, [] Topographic Map, [] Land Survey Est. Accuracy: [] <3 m, [] 3-5 m, [] 5-15 m, [] >15 m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 WATER WELL OWNER: City of Cuba RR#, Street Address, Box #: 313 Baird St. City, State, ZIP Code : Cuba, KS 66940 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 LOCATE WELL WITH AN "X" IN SECTION BOX: <div style="text-align:center;">N</div> <table border="1" style="width:100%; height:100px;"><tr><td>--NW--</td><td>--NE--</td></tr><tr><td>--SW--</td><td>X --SE--</td></tr></table> <div style="text-align:center;">S</div> <div style="text-align:center;"> -----1 mile----- </div> | | --NW-- | --NE-- | --SW-- | X --SE-- | 4 DEPTH OF COMPLETED WELL 215 ft. Depth(s) Groundwater Encountered (1).133 ft. (2).....ft. (3).....ft. WELL'S STATIC WATER LEVEL.....ft. below land surface measured on mo/day/yr..11/29/11..... Pump test data: Well water was ..169' 6".....ft. after ..3..... hours pumping ..15..... gpm EST. YIELD ..15.....gpm. Well water was ..169' 6".....ft. after ..3..... hours pumping ..15..... gpm Bore Hole Diameter 14.5.....in. to .215.....ft., andin. toft. WELL WATER TO BE USED AS: [X] Public water supply [] Geothermal [] Injection well [] Domestic [] Feedlot [] Oil field water supply [] Dewatering [] Other (Specify below) [] Irrigation [] Industrial [] Domestic-lawn & garden [] Monitoring well Was a chemical/bacteriological sample submitted to Department? [X] Yes [] No If yes, mo/day/yr sample was submitted ..01/23/2012..... Water well disinfected? [X] Yes [] No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| --NW-- | --NE-- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| --SW-- | X --SE-- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 TYPE OF CASING USED: [] Steel [X] PVC [] Other CASING JOINTS: [X] Glued [] Clamped [] Welded [] Threaded Casing diameter 6 I.D. in. to .180..... ft., Diameter 6 I.D. in. to .200-.215 ft., Diameter in. to ft. Casing height above land surface ..36..... in., Weight 4.95.....lbs./ft., Wall thickness or gauge No. ...390" TYPE OF SCREEN OR PERFORATION MATERIAL: [] Steel [] Stainless Steel [X] PVC [] Other (Specify) [] Brass [] Galvanized Steel [] None used (open hole) SCREEN OR PERFORATION OPENINGS ARE: [] Continuous slot [X] Mill slot [] Gauze wrapped [] Torch cut [] Drilled holes [] None (open hole) [] Louvered shutter [] Key punched [] Wire wrapped [] Saw cut [] Other (specify) SCREEN-PERFORATED INTERVALS: From...180..... ft. to ...200..... ft., From ft. to ft. From..... ft. to ft., From ft. to ft. GRAVEL PACK INTERVALS: From...175..... ft. to ...215..... ft., From ft. to ft. From..... ft. to ft., From ft. to ft. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 GROUT MATERIAL: [X] Neat cement [] Cement grout [X] Bentonite [] Other Grout Intervals: From 0..... ft. to ...30..... ft., From 30..... ft. to ...175..... ft., From ft. to ft. What is the nearest source of possible contamination: [X] Septic tank [] Lateral lines [] Pit privy [] Livestock pens [] Insecticide storage [] Other (specify below) [] Sewer lines [] Cesspool [] Sewage lagoon [] Fuel storage [] Abandoned water well [] Watertight sewer lines [] Seepage pit [] Feedyard [] Fertilizer storage [] Oil well/gas well Direction from well East Distance from well 300' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%;"><tr><td>FROM</td><td>TO</td><td>LITHOLOGIC LOG</td><td>FROM</td><td>TO</td><td>LITHO. LOG (cont.) or PLUGGING INTERVALS</td></tr><tr><td></td><td></td><td>See attached</td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> | | | | | | FROM | TO | LITHOLOGIC LOG | FROM | TO | LITHO. LOG (cont.) or PLUGGING INTERVALS | | | See attached | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | See attached | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was [X] constructed, [] reconstructed, or [] plugged under my jurisdiction and was completed on (mo/day/year) ..11.29.2011.... and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 755..... This Water Well Record was completed on (mo/day/year) ..02/02/2012..... under the business name of Sargent Drilling by (signature) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks and check the correct answers. Send three copies (white, blue, pink) to Kansas Depar tment of Health and E nvironment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5524. Sen d one copy to WATER WELL OWNER and retain one for your records. Include fee of \$5.00 for each constructed well. Vi sit us at http://www.kdheks.gov/waterwell/index.html. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Sargent Drilling
INDUSTRIAL ENGINEERING
COMPLETE MUNICIPAL AND INDUSTRIAL
WELL AND PUMP SERVICE

PO Box 367
Geneva, NE 68361-0367

846 South 13th St.

Phone: (402) 759-3902
1-888-496-3902

TEST HOLE LOG

| | |
|---|--------------------------|
| CUSTOMER: City of Cuba, KS | |
| WELL ID: Well #6 | |
| LOCATION: NE ¼ NE ¼ SE ¼ SW ¼, 8-T3N-R1W, Republic Co., KS | |
| LATITUDE: 39° 48' 07.3" | |
| LONGITUDE: 097° 27' 13.5" | |
| ELEVATION: 1599' | |
| FOOTAGES: 1169 feet from the South section line and 2798 feet from the East section line. | |
| DATE: 11-29-11 | DRILLED BY: Scott & Rick |

SWL:
PWL

| <u>from feet</u> | <u>- to feet</u> | |
|------------------|------------------|---|
| 0 | 15 | Topsoil and tan clay with white mineral |
| 15 | 19 | Yellow clay |
| 19 | 20 | Hard brown rock |
| 20 | 35 | White and yellow clay with strips of limestone |
| 35 | 40 | Gray clay with limestone and black shale |
| 40 | 56 | Gray shale with thin limestone layers and black shale strips |
| 56 | 60 | Gray and white shale |
| 60 | 80 | Medium hard black and gray shale with blue shale strips |
| 80 | 100 | Medium hard black and gray shale with hard strips and blue shale traces |
| 100 | 108 | Medium black and gray shale |
| 108 | 120 | Gray shale |
| 120 | 140 | Gray shale with thin layers of limestone |
| 140 | 160 | Gray shale with thin layers of limestone and fine sandstone |
| 160 | 167 | Gray shale |
| 167 | 176 | White shale with black shale layer |
| 176 | 196 | Fine sandstone |
| 196 | 200 | White and gray shale and limestone strip |
| 200 | 220 | Shale and limestone |

Well Depth: 215'
Bore Hole Dia.: 14 ½"

Plain casing: 180' of 6" PVC
Perf. casing: 20' of 6" PVC
Plain casing: 15' of 6" PVC

slot size: .032"

Neat cement grout from 0' to 30'
Bentonite grout from 30' to 175'
Gravel pack from 175' to 215'

dh