

Division of Water Resources App. No.

1 LOCATION OF WATER WELL: County: <u>Sedgewick</u> Fraction: <u>SW 1/4 SW 1/4 NE 1/4</u> Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here ☐ <u>10' North of E. 17th Street N. and 50' West of North Poplar Street, Wichita, KS.</u>		Division of Water Resources App. No. Section Number <u>10</u> Township No. <u>T 27 S</u> Range Number <u>R 1 E</u> ☒ ☐ W Global Positioning System (GPS) information: Latitude: <u>37.71554722</u> (in decimal degrees) Longitude: <u>-97.30724722</u> (in decimal degrees) Elevation: _____ Datum: ☐ WGS 84, ☒ NAD 83, ☐ NAD 27 Collection Method: ☒ GPS unit (Make/Model: <u>Garmin Nuvi</u>) ☐ Digital Map/Photo, ☐ Topographic Map, ☐ Land Survey Est. Accuracy: ☐ <3 m, ☐ 3-5 m, ☐ 5-15 m, ☐ >15 m																																																																						
2 WATER WELL OWNER: <u>Union Pacific Railroad</u> RR#, Street Address, Box #: <u>Jerry McDermott</u> City, State, ZIP Code: <u>1400 Douglas Street</u> <u>Stop 1030, Omaha, NE. 68179-1030</u>																																																																								
3 LOCATE WELL WITH AN "X" IN SECTION BOX: [Diagram showing a section box divided into four quadrants: NW, NE, SE, SW. An 'X' is marked in the center.]		4 DEPTH OF COMPLETED WELL <u>28</u> ft. Depth(s) Groundwater Encountered (1)..... ft. (2)..... ft. (3)..... ft. WELL'S STATIC WATER LEVEL.....ft. below land surface measured on mo/day/yr..... Pump test data: Well water wasft. after hours pumping..... gpm EST. YIELD.....gpm. Well water wasft. after hours pumping..... gpm Bore Hole Diameter <u>10</u> in. to <u>3.5</u> ft., and in. to ft. WELL WATER TO BE USED AS: ☐ 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? ☐ Yes ☒ No If yes, mo/day/yr sample was submitted..... Water well disinfected? ☐ Yes ☒ No																																																																						
5 TYPE OF CASING USED: ☐ Steel ☒ PVC ☐ Other, CASING JOINTS: ☐ Glued ☐ Clamped ☐ Welded ☒ Threaded Casing diameter <u>6</u> in. to <u>18</u> ft., Diameter in. to ft., Diameter in. to ft. Casing height above land surface.... <u>4</u> in., Weight <u>5.4</u> lbs./ft., Wall thickness or gauge No. <u>sch. 80</u> TYPE OF SCREEN OR PERFORATION MATERIAL: ☐ Steel ☒ Stainless Steel ☐ PVC ☐ Other (Specify) :, ☐ Brass ☐ Galvanized Steel ☐ None used (open hole) SCREEN OR PERFORATION OPENINGS ARE: ☐ Continuous slot ☐ 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 <u>28</u> ft. to <u>18</u> ft., From ft. to ft. From ft. to ft., From ft. to ft. GRAVEL PACK INTERVALS: From <u>28</u> ft. to <u>15</u> ft., From ft. to ft. From ft. to ft., From ft. to ft.																																																																								
6 GROUT MATERIAL: ☐ Neat cement ☒ Cement grout ☐ Bentonite ☐ Other, Grout Intervals: From <u>15</u> ft. to <u>4</u> ft., From ft. to ft., From ft. to ft. What is the nearest source of possible contamination: ☐ Septic tank ☐ Lateral lines ☐ Pit privy ☐ Livestock pens ☐ Insecticide storage ☒ Other (specify below) <u>Fuel</u> ☐ 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 Distance from well																																																																								
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7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was ☒ constructed, ☐ reconstructed, or ☐ plugged under my jurisdiction and was completed on (mo/day/year) <u>9/8/13</u> and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. <u>597</u> , This Water Well Record was completed on (mo/day/year) <u>9-20-13</u> under the business name of <u>Cascade Drilling L.P.</u> by (signature) <u>[Signature]</u> 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 Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5524. Send one copy to WATER WELL OWNER and retain one for your records. Include fee of \$5.00 for each constructed well. Visit us at http://www.kdheks.gov/waterwell/index.html.																																																																								

ARCADIS Sample/Core Log

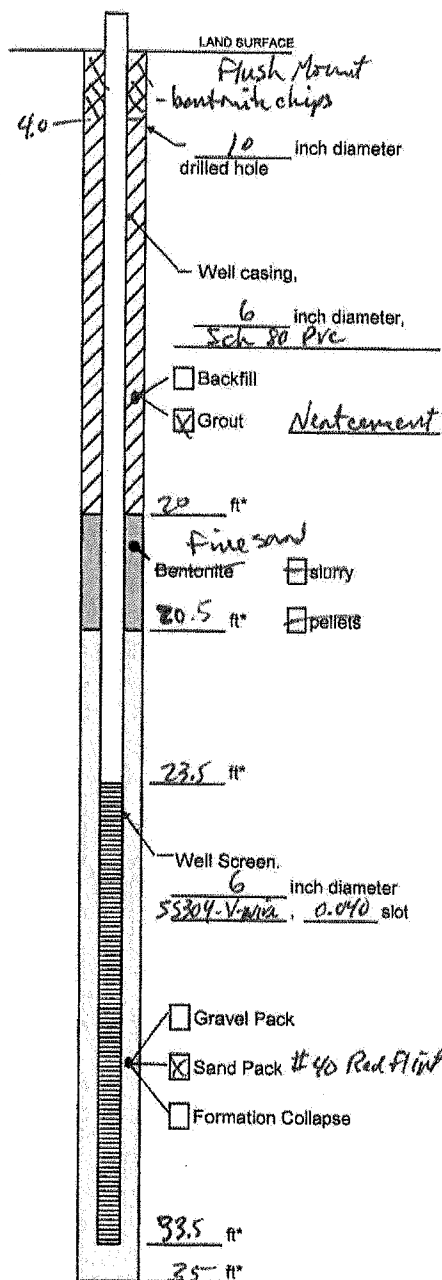
Boring/Well 1W-7 Project/No. 29th & 6th / RCO01648 Page 1 of 1
 Site Location 17th & Poplar - NW corner Drilling Started 0745 9/8/2013 Drilling Completed 1000 9/8/2013
 Total Depth Drilled 35 Feet Hole Diameter 10 inches Type of Sample/ Coring Device core barrel
 Length and Diameter of Coring Device 10' x 4" Sampling Interval 10' feet
 Land-Surface Elev. 1314 feet ☐ Surveyed ☒ Estimated Datum GL
 Drilling Fluid Used Potable water Drilling Method Roto Soni
 Drilling Contractor Cascade Drilling - Schofield, WI Driller Roy Buckenberger Helper Ron Walkovick
 Prepared By Larry Benoffen Hammer Weight — Hammer Drop — ins.

Sample/Core Depth (feet below land surface)		Core Recovery (feet)	Time/Hydraulic Pressure or Blows per 6 Inches	Sample/Core Description
From	To			
Surf	5	—	—	Hydroknifed - Not Logged
5	15	7.5	—	CL, lean clay v. dk gray brown (2.5Y 3/2), very stiff, non-plastic, dry, no PID response at 11' grade to ML, sandy silt, dk brown 2.5Y 4/3, stiff, non-plastic, non-cohesive, dry, no apparent bedding, no PID response at 12.5' grade to ML, silt, olive brown (2.5Y 4/3), soft, non-plastic, ^{SL} non-cohesive, no apparent bedding, no PID response
15	25	2.0	—	SL, interbedded fine sand (SP) and CL, lean clay, olive brown (2.5Y 4/3), sand is loose, damp, clay is soft, mod. plastic, 1-2" beds (?) - pre recovery affected logging - in 2nd run to recover core, SW well graded sand fine to coarse, well rounded sand, below (2.5Y 5/2), 80% quartz, wet, no PID response - on third run possible zone of dk gray clay at ~22-23'
25	35	7.5	—	SW as above some fine gravel, fine to medium grain about 30' gravelly layer at 30-30.1 approximately, poorly bedded to contact with CL, lean clay, (weathered shale) at 33.5' fast , non-plastic, v. stiff, lt. olive brown (2.5Y 5/4) color grades to v. dk bluish gray (5PB 3/2) fine irregular beds, dry, no PID response

ARCADIS

Well Construction Log

(Unconsolidated)



Measuring Point is
Top of Well Casing
Unless Otherwise Noted.

* Depth Below Land Surface

Project 2924 # crm (UPRR)
150001648.0101.0000 Well 1W-7
Town/City Wichita, KS
County Sedgewick State KS
Permit No. Wichita #C230475 C230476

Land-Surface (LS) Elevation and Datum:

1314 feet ☐ Surveyed
☒ Estimated

Installation Date(s) 9/8/2013

Drilling Method Rotary

Drilling Contractor Cascade Drilling

Drilling Fluid Potable water from Wichita
hydrants

Development Technique(s) and Date(s)

Fluid Loss During Drilling 400 gallons

Water Removed During Development _____ gallons

Static Depth to Water _____ feet below M.P.

Pumping Depth to Water _____ feet below M.P.

Pumping Duration _____ hours

Yield _____ gpm Date _____

Specific Capacity _____ gpm/ft

Well Purpose Injection testing

Remarks _____

Prepared by Larry Bensink