

WATER WELL RECORD

Form WWC-5

Division of Water Resources App. No.

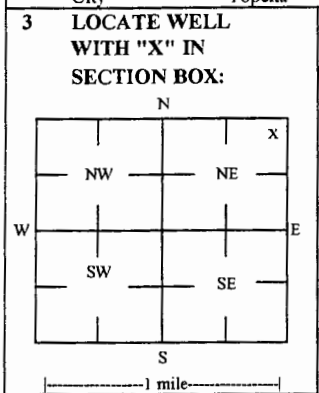
Well ID

MW19

Original Record Correction Change in Well Ust

1 LOCATION OF WATER WELL: County Harper Fraction NE 1/4 NE 1/4 NE 1/4 NE 1/4 Section Number 12 Township Number T 32 S Range Number R 7 E W

2 WELL OWNER: Last Name: First: Street or Rural Address where well is located (if unknown, distance and direction from nearest town or intersection): If at owner's address, check here: 423 E 14th St, Harper, KS



4 DEPTH OF COMPLETED WELL: 35 ft Depth(s) Groundwater Encountered: 1) ft 2) ft 3) ft, or 4) Dry Well WELL'S STATIC WATER LEVEL: 24.45 ft. X below land surface, measured on (mo-day-yr) 12/7/2016

5 Latitude: 37.28293 (decimal degrees) Longitude: 98.02203 (decimal degrees) Horizontal Datum: X WGS 84 NAD 83 NAD 29 Source for Latitude/Longitude: GPS (unit make/model): (WAAS enabled? Yes No) X Land Survey Topographic Map Online Mapper

6 Elevation 1416.45 ft Ground Level X TOC Source: X Land Survey GPS Topographic Map Other

7 WELL WATER TO BE USED AS: 1 Domestic: Household Lawn & Garden Livestock Irrigation Feedlot Industrial 5 Public Water Supply: well ID 6 Dewatering: how many wells? 7 Aquifer Recharge: well ID 8 X Monitoring: well ID MW19 9 Environmental Remediation: well ID Air Sparge Soil Vapor Extractor Recovery Injection 10 Oil Field Water Supply: lease 11 Test Hole: well ID Cased Uncased Geotechnical 12 Geothermal: How many bores? a) Closed Loop Horizontal Vertical b) Open Loop Surface Discharge Inj. of Water Other (specify):

Was a chemical/bacteriological sample submitted to KDHE? Yes No X No If yes, date sample was submitted: Water well disinfected? Yes No X No

8 TYPE OF CASING USED: Steel PVC X Other CASING JOINTS: Glued Clamped Welded X Threaded Casing diameter 2 in. to 20 ft, Diameter in. to ft, Diameter in. to ft, Casing height above land surface -0.39 in. Weight lbs./ft. Well thickness or gauge No TYPE OF SCREEN OR PERFORATION MATERIAL: Steel Stainless Steel Fiberglass PVC X Other (Specify) Brass Galvanized Steel Concrete tile None used (open hole) SCREEN OR PERFORATION OPENINGS ARE: Continuous Slot X Mill Slot Gauze Wrapped Torch Cut Drilled Holes Other (Specify) Louvered Shutter Key Punched Wire Wrapped Saw Cut None (Open Hole) SCREEN-PERFORATED INTERVALS: From 20 ft. to 35 ft, From ft. to ft, From ft. to ft, GRAVEL PACK INTERVALS: From 18 ft. to 35.5 ft, From ft. to ft, From ft. to ft,

9 GROUT MATERIAL: Neat cement Cement grout X Bentonite X Other Concrete: 0-0.5' Grout intervals: From 0.5 ft. to 18 ft, From ft. to ft, From ft. to ft,

Nearest source of possible contamination: Septic Tank Lateral Lines Pit Privy Livestock Pens Insecticide Storage Sewer Lines Cess Pool Sewage Lagoon X Fuel Storage Abandoned Water Well Watertight Sewer Lines Seepage Pit Feedyard Fertilizer Storage Oil Well / Gas Well Other (Specify) Direction from well? NE Distance from well? ~60 ft

10 FROM TO LITHOLOGIC LOG FROM TO LITHO. LOG (cont.) or PLUGGING INTERVALS

| FROM | TO   | LITHOLOGIC LOG               | FROM | TO | LITHO. LOG (cont.) or PLUGGING INTERVALS |
|------|------|------------------------------|------|----|--|
| 0    | 0.7  | Asphalt and gravel fill      |      |    |  |
| 0.7  | 9    | Silt                         |      |    |  |
| 9    | 13   | Clayey silt                  |      |    |  |
| 13   | 15   | Silt                         |      |    |  |
| 15   | 31   | Clayey silt                  |      |    |  |
| 31   | 31.5 | Sand, coarse grained, gravel |      |    |  |
| 31.5 | 35.5 | Clayey silt                  |      |    |  |

Notes: KDHE ID: Ron's Service; U2-039-12937

11 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) 12/7/16 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No 757 This Water Well Record was completed on (mo-day-year) 1/25/17 under the business name of Larsen & Associates, Inc. Signature

# DENNIS L HANDKE

1820 NW 59th Terrace  
TOPEKA, KANSAS 66618  
785-286-4047 Home  
785-286-1990 Fax

Jesse Chapman  
Larsen & Assoc.  
1311 E. 25<sup>th</sup> St., Suite B  
Lawrence, Kansas, 66046

January 18, 2017  
Revised March 10, 2017

RE: Monitor Well Elevation Survey  
423 E. 14<sup>th</sup> St. Harper, Kansas

Proj. 17-00A  
KDHE ID# U2-039-12937  
Ron's Service

Bench Mark: Square cut on Southeast corner of concrete sign base North of the building.  
Elev: 1416.06      North 5300      West 45      (from SE Cor. Sec. 12-32-7W)

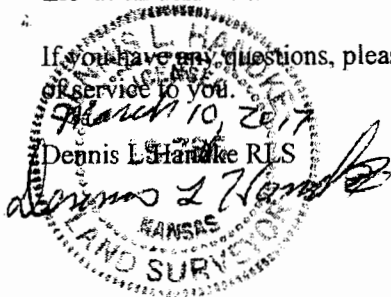
|       |          |         |       |      |                                       |
|-------|----------|---------|-------|------|---------------------------------------|
| MW-15 | rim      | 1415.73 | North | 5282 | NE1/4,NE1/4,NE1/4,NE1/4               |
|       | top pipe | 1415.30 | West  | 125  | Lat = 37.28301    Long = 98.02184     |
| MW-16 | rim      | 1415.94 | North | 5267 | NE1/4,NE1/4,NE1/4,NE1/4               |
|       | top pipe | 1415.62 | West  | 37   | Lat = 37.28297    Long = 98.02154     |
| MW-17 | rim      | 1416.82 | North | 5245 | NE1/4,NE1/4,NE1/4,NE1/4               |
|       | top pipe | 1416.50 | West  | 103  | Lat = 37.28291    Long = 98.02177     |
| MW-18 | rim      | 1414.17 | North | 5369 | SE1/4,SE1/4,SE1/4,SE1/4 (Sec 1-32-7)  |
|       | top pipe | 1413.86 | West  | 45   | Lat = 37.28325    Long = 98.02157     |
| MW-19 | rim      | 1416.84 | North | 5254 | NE1/4,NE1/4,NE1/4,NE1/4               |
|       | top pipe | 1416.45 | West  | 180  | Lat = 37.28293    Long = 98.02203     |
| MW-20 | rim      | 1415.60 | North | 5262 | NW1/4,NW1/4,NW1/4,NW1/4 (Sec. 7-32-6) |
|       | top pipe | 1415.19 | East  | 91   | Lat = 37.28296    Long = 98.02110     |
| MW-21 | rim      | 1417.53 | North | 5135 | NE1/4NW1/4,NE1/4,NE1/4                |
|       | top pipe | 1417.14 | West  | 68   | Lat = 37.28260    Long = 98.02164     |
| MW-22 | rim      | 1414.66 | North | 5368 | SE1/4,SE1/4,SE1/4,SE1/4 (Sec. 1-32-7) |
|       | top pipe | 1414.17 | West  | 184  | Lat = 37.28324    Long = 98.02205     |
| MW-23 | rim      | 1416.85 | North | 5096 | NW1/4,NW1/4,NW1/4,NW1/4 (Sec. 7-32-6) |
|       | top pipe | 1416.39 | East  | 37   | Lat = 37.28250    Long = 98.02128     |

Lat & Long derived from the Harper 7.5 minute Quad map, WGS84

Elevation derived from USGS BM L309 "1953". NAVD 88

If you have any questions, please feel free to call me. Thank you for the opportunity to be of service to you.

Dennis L Handke RLS



RECEIVED

MAR 13 2017

BUREAU OF WATER