

WATER WELL RECORD

Form WWC-5

Division of Water Resources App. No.

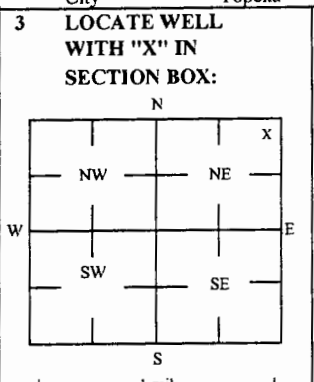
Well ID

MW17

Original Record Correction Change in Well Use

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



3 LOCATE WELL WITH 'X' IN SECTION BOX: 4 DEPTH OF COMPLETED WELL: 35.1 ft Depth(s) Groundwater Encountered: 1) ft 2) ft 3) ft, or 4) Dry Well

5 Latitude: 37.28291 (decimal degrees) Longitude: 98.02177 (decimal degrees) Horizontal Datum: X WGS 84 NAD 83 NAD 29

6 Elevation 1416.50 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 MW17 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 20.1 ft. Diameter in. to ft. Diameter in. to ft. Casing height above land surface -0.32 in. Weight lbs./ft. Well thickness or gauge No TYPE OF SCREEN OR PERFORATION MATERIAL: Steel Stainless Steel Fiberglass X PVC 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 20.1 ft. to 35.1 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? N Distance from well? ~30 ft

Table with columns: FROM, TO, LITHOLOGIC LOG, FROM, TO, LITHO. LOG (cont.) or PLUGGING INTERVALS. Rows include: 0-0.7 Chert gravel, 0.7-6 Silty clay grading to clay, 6-8 Silt, loess, 8-11 Silty clay, 11-18.5 Silt, 18.5-19.5 Sand, fine grained, 19.5-23 Silt, 23-24 Sand, medium grained, 24-35.5 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) 12/5/16 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

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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)

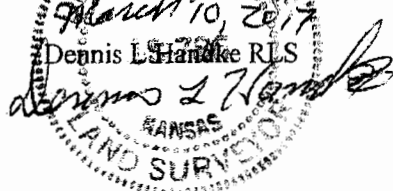
MW-15	rim	1415.73	North	5282	NE1/4,NE1/4,NE1/4,NE1/4
	top pipe	1415.30	West	125	Lat = 37.28301    Long = 98.02184
MW-16	rim	1415.94	North	5267	NE1/4,NE1/4,NE1/4,NE1/4
	top pipe	1415.62	West	37	Lat = 37.28297    Long = 98.02154
MW-17	rim	1416.82	North	5245	NE1/4,NE1/4,NE1/4,NE1/4
	top pipe	1416.50	West	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.

March 10, 2017  
Dennis L Handke RLS



RECEIVED

MAR 13 2017

BUREAU OF WATER