

**WATER WELL RECORD Form WWC-5**

Original Record  Correction  Change in Well Use

Division of Water Resources App. No.  

Well ID MW 1

<b>1 LOCATION OF WATER WELL:</b> County: Harper	Fraction SW 1/4 SW 1/4 NW 1/4 NW 1/4	Section Number 21	Township Number T 33 S	Range Number R 5 <input type="checkbox"/> E <input checked="" type="checkbox"/> W
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<b>2 WELL OWNER:</b> Last Name: First: Business: Magellan Midstream Partners Address: One Williams Center City: Tulsa State: OK ZIP: 74172	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: <input type="checkbox"/> Mile Post 62.5 (N 90th Ave. and N 10th Road) near Freeport, KS
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<b>3 LOCATE WELL WITH "X" IN SECTION BOX:</b> N <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"><table style="width: 100%; border-collapse: collapse;"><tr><td style="width: 25%; text-align: center;">X NW</td><td style="width: 25%; text-align: center;">NE</td></tr><tr><td style="width: 25%; text-align: center;">SW</td><td style="width: 25%; text-align: center;">SE</td></tr></table></div> <p style="text-align: center;">S -----1 mile-----</p>	X NW	NE	SW	SE	<b>4 DEPTH OF COMPLETED WELL:</b> 25 ft. Depth(s) Groundwater Encountered: 1) 20 ft. 2) _____ ft. 3) _____ ft., or 4) <input type="checkbox"/> Dry Well WELL'S STATIC WATER LEVEL: _____ ft. <input type="checkbox"/> below land surface, measured on (mo-day-yr) _____ <input type="checkbox"/> above land surface, measured on (mo-day-yr) _____ Pump test data: Well water was _____ ft. after _____ hours pumping _____ gpm Well water was _____ ft. after _____ hours pumping _____ gpm Estimated Yield: _____ gpm Bore Hole Diameter: 8.5 in. to 25 ft. and _____ in. to _____ ft.
X NW	NE				
SW	SE				

<b>5 Latitude:</b> 37.16528 (decimal degrees) <b>Longitude:</b> -97.87413 (decimal degrees) Horizontal Datum: <input checked="" type="checkbox"/> WGS 84 <input type="checkbox"/> NAD 83 <input type="checkbox"/> NAD 27 Source for Latitude/Longitude: <input checked="" type="checkbox"/> GPS (unit make/model: <u>Garmin etrek</u> ) (WAAS enabled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No) <input type="checkbox"/> Land Survey <input type="checkbox"/> Topographic Map <input type="checkbox"/> Online Mapper: _____
<b>6 Elevation:</b> 1300 ft. <input checked="" type="checkbox"/> Ground Level <input type="checkbox"/> TOC Source: <input type="checkbox"/> Land Survey <input checked="" type="checkbox"/> GPS <input type="checkbox"/> Topographic Map <input checked="" type="checkbox"/> Other KOLAR

<b>7 WELL WATER TO BE USED AS:</b>		
<input type="checkbox"/> 1. Domestic: <input type="checkbox"/> Household <input type="checkbox"/> Lawn & Garden <input type="checkbox"/> Livestock <input type="checkbox"/> 2. Irrigation <input type="checkbox"/> 3. Feedlot <input type="checkbox"/> 4. Industrial	<input type="checkbox"/> 5. Public Water Supply: well ID _____ <input type="checkbox"/> 6. Dewatering: how many wells? _____ <input type="checkbox"/> 7. Aquifer Recharge: well ID _____ <input checked="" type="checkbox"/> 8. Monitoring: well ID <u>MW-1</u> <input type="checkbox"/> 9. Environmental Remediation: well ID _____ <input type="checkbox"/> Air Sparge <input type="checkbox"/> Soil Vapor Extraction <input type="checkbox"/> Recovery <input type="checkbox"/> Injection	<input type="checkbox"/> 10. Oil Field Water Supply: lease _____ <input type="checkbox"/> 11. Test Hole: well ID _____ <input type="checkbox"/> Cased <input type="checkbox"/> Uncased <input type="checkbox"/> Geotechnical <input type="checkbox"/> 12. Geothermal: how many bores? _____ a) Closed Loop <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical b) Open Loop <input type="checkbox"/> Surface Discharge <input type="checkbox"/> Inj. of Water <input type="checkbox"/> 13. Other (specify): _____

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

<b>8 TYPE OF CASING USED:</b> <input type="checkbox"/> Steel <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other _____ CASING JOINTS: <input type="checkbox"/> Glued <input type="checkbox"/> Clamped <input type="checkbox"/> Welded <input checked="" type="checkbox"/> Threaded Casing diameter 2 in. to 15 ft., Diameter _____ in. to _____ ft., Diameter _____ in. to _____ ft. Casing height above land surface 30 in. Weight _____ lbs./ft. Wall thickness or gauge No. Sch 40 TYPE OF SCREEN OR PERFORATION MATERIAL: <input type="checkbox"/> Steel <input type="checkbox"/> Stainless Steel <input type="checkbox"/> Fiberglass <input checked="" type="checkbox"/> PVC <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Brass <input type="checkbox"/> Galvanized Steel <input type="checkbox"/> Concrete tile <input type="checkbox"/> None used (open hole) SCREEN OR PERFORATION OPENINGS ARE: <input type="checkbox"/> Continuous Slot <input checked="" type="checkbox"/> Mill Slot <input type="checkbox"/> Gauze Wrapped <input type="checkbox"/> Torch Cut <input type="checkbox"/> Drilled Holes <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Louvered Shutter <input type="checkbox"/> Key Punched <input type="checkbox"/> Wire Wrapped <input type="checkbox"/> Saw Cut <input type="checkbox"/> None (Open Hole) SCREEN-PERFORATED INTERVALS: From 15 ft. to 25 ft., From _____ ft. to _____ ft., From _____ ft. to _____ ft. GRAVEL PACK INTERVALS: From 13 ft. to 25 ft., From _____ ft. to _____ ft., From _____ ft. to _____ ft.
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<b>9 GROUT MATERIAL:</b> <input type="checkbox"/> Neat cement <input type="checkbox"/> Cement grout <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other _____ Grout Intervals: From 2 ft. to 13 ft., From _____ ft. to _____ ft., From _____ ft. to _____ ft. <b>Nearest source of possible contamination:</b> <input type="checkbox"/> Septic Tank <input type="checkbox"/> Lateral Lines <input type="checkbox"/> Pit Privy <input type="checkbox"/> Livestock Pens <input type="checkbox"/> Insecticide Storage <input type="checkbox"/> Sewer Lines <input type="checkbox"/> Cess Pool <input type="checkbox"/> Sewage Lagoon <input type="checkbox"/> Fuel Storage <input type="checkbox"/> Abandoned Water Well <input type="checkbox"/> Watertight Sewer Lines <input type="checkbox"/> Seepage Pit <input type="checkbox"/> Feedyard <input type="checkbox"/> Fertilizer Storage <input type="checkbox"/> Oil Well/Gas Well <input type="checkbox"/> Other (Specify) _____ Direction from well? _____ Distance from well? _____ ft.
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10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS

**Notes:**

<b>11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION:</b> This water well was <input checked="" type="checkbox"/> constructed, <input type="checkbox"/> reconstructed, or <input type="checkbox"/> plugged under my jurisdiction and was completed on (mo-day-year) 2/21/2018 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 719. This Water Well Record was completed on (mo-day-year) 3/1/2018 under the business name of <u>Below Ground Surface, Inc.</u> Signature <u>[Signature]</u>
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Mail 1 white copy along with a fee of \$5.00 for each constructed well to: Kansas Department of Health and Environment, Bureau of Water, GWTS Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Mail one to Water Well Owner and retain one for your records. Telephone 785-296-5524.



WSP USA, Inc.  
 405 East 19th Avenue  
 Suite A2  
 North Kansas City, MO 64116  
 TEL: +1 816 421 7766

**GEOLOGIC LOG**

WELL NO.: MW-1

**OWNER:** Magellan Ammonia Pipeline, L.P.  
**LOCATION:** MP 62.5, Harper County, Kansas  
**DRILLING CO.:** BGS  
**OBSERVATION METHOD:** Cuttings  
**DRILLING METHOD:** Hollow Stem Auger

**OBSERVER:** B. Bailey  
**DATE COMPLETED:** February 19, 2018  
**TOTAL DEPTH OF HOLE:** 25 feet below ground surface  
**STATIC WATER LEVEL:** 22.9 ft bTOC (2-20-18)

DEPTH IN FBG	WELL CONSTRUCTION	GRAPHIC	LITHOLOGIC DESCRIPTION	FROM	TO	SAMPLE TYPE	DEPTH IN FBG
0	Stick-up						0
0	Concrete Grout		Pre-clear for underground utilities by vacuum excavation with air knife assistance as needed.	0	5	C	0
-5	PDS Bentonite Plug		SILT AND CLAY: red-brown, trace weathered shale.	5	10	C	-5
-10	2" ID Sch 40 PVC		SHALE: dark red, weathered.	10	15	C	-10
-15	Sand Filter Pack		@ 15 fbg, gray-green, weathered.	15	20	C	-15
-20	2" ID Sch 40 PVC Slotted 0.010"		@ 20 fbg, red-orange, weathered, moist.	20	25	C	-20
-25							-25

NOTES: ft bTOC = feet below top of casing ppm = parts per million C = cuttings FBG = feet below grade