

WATER WELL RECORD Form WWC-5

Division of Water Resources App. No.

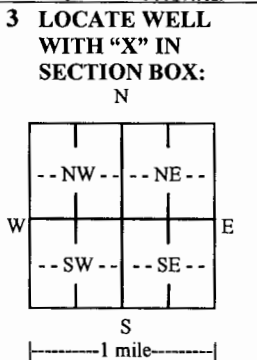
MW-48C

Original Record Correction Change in Well Use

Well ID

1 LOCATION OF WATER WELL: County: Johnson	Fraction SE ¼ SE ¼ NW ¼ ¼	Section Number 36	Township Number T 13 S	Range Number R 23 <input checked="" type="checkbox"/> E <input type="checkbox"/> W
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2 WELL OWNER: Last Name: First: Business: The Boeing Company Address: P.O. Box 7730 MC K29-29 Address: City: Wichita State: KS ZIP: 66210	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"/> On Parkway Dr approximately 150 ft North from the intersection of Lane St and Parkway Dr
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4 DEPTH OF COMPLETED WELL: 25 ft.

Depth(s) Groundwater Encountered: 1) 12 ft. (Kaser) 2) ft. 3) ft. or 4) Dry well (Cascade)

WELL'S STATIC WATER LEVEL: 7.62 ft.

below land surface, measured on (mo-day-yr) 6/19/17
 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: in. to ft. and in. to ft.

5 Latitude: 38°52'38.0785" (decimal degrees)
Longitude: -094°48'29.1916" (decimal degrees)
Horizontal Datum: WGS 84 NAD 83 NAD 27
Source for Latitude/Longitude:
 GPS (unit make/model: (WAAS enabled? Yes No)
 Land Survey Topographic Map
 Online Mapper:

6 Elevation: 1044.77 ft. Ground Level TOC
Source: Land Survey GPS Topographic Map
 Other

7 WELL WATER TO BE USED AS:

1. Domestic: <input type="checkbox"/> Household <input type="checkbox"/> Lawn & Garden <input type="checkbox"/> Livestock	5. <input type="checkbox"/> Public Water Supply: well ID	10. <input type="checkbox"/> Oil Field Water Supply: lease
2. <input type="checkbox"/> Irrigation	6. <input type="checkbox"/> Dewatering: how many wells?	11. Test Hole: well ID
3. <input type="checkbox"/> Feedlot	7. <input type="checkbox"/> Aquifer Recharge: well ID	<input type="checkbox"/> Cased <input type="checkbox"/> Uncased <input type="checkbox"/> Geotechnical
4. <input type="checkbox"/> Industrial	8. <input checked="" type="checkbox"/> Monitoring: well ID MW-48C	12. Geothermal: how many bores?
	9. Environmental Remediation: well ID	a) Closed Loop <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical
	<input type="checkbox"/> Air Sparge <input type="checkbox"/> Soil Vapor Extraction	b) Open Loop <input type="checkbox"/> Surface Discharge <input type="checkbox"/> Inj. of Water
	<input type="checkbox"/> Recovery <input type="checkbox"/> Injection	13. <input type="checkbox"/> Other (specify):

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

Water well disinfected? Yes No

8 TYPE OF CASING USED: Steel PVC Other CASING JOINTS: Glued Clamped Welded Threaded

Casing diameter 4 in. to 25 ft., Diameter in. to ft., Diameter in. to ft.
Casing height above land surface -0.43 in. Weight lbs./ft. Wall thickness or gauge No. Sch 40

TYPE OF SCREEN OR PERFORATION MATERIAL:
 Steel Stainless Steel Fiberglass PVC Other (Specify)
 Brass Galvanized Steel Concrete tile None used (open hole)

SCREEN OR PERFORATION OPENINGS ARE:
 Continuous Slot 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 25 ft., From ft. to ft., From ft. to ft.
GRAVEL PACK INTERVALS: From 18 ft. to 25 ft., From ft. to ft., From ft. to ft.

9 GROUT MATERIAL: Neat cement Cement grout Bentonite Other

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 Fuel Storage Abandoned Water Well
 Watertight Sewer Lines Seepage Pit Feedyard Fertilizer Storage Oil Well/Gas Well
 Other (Specify) Former Chemical Storage

Direction from well? SW Distance from well? ~850 ft.

10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	1	Pavement and gravel	20	23	Laminated shale
1	3	Silty clay	23	24	Silty clay/weathered shale
3	10	Mottled silt with clay	24	25	Competent limestone
10	12.5	Clay/weathered shale			
12.5	13.5	Weathered limestone			
13.5	14	Silty clay/weathered shale			
14	18	Weathered sandy shale			Notes:
18	19	Weathered sandstone			
19	20	Weathered shale/sandstone			

11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo-day-year) 5/17/17 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 597 This Water Well Record was completed on (mo-day-year) 8/28/17 under the business name of Cascade Signature Steve Johnson

HALEY ALDRICH		TEST BORING REPORT				BORING NO. MW-48B							
						Page 1 of 1							
PROJECT: <u>Former Chemical Commodities, Inc. Site</u>				H&A FILE NO.: <u>12448-002</u>									
LOCATION: <u>Olathe, KS</u>				PROJECT MGR.: <u>Michael Bond</u>									
CLIENT: <u>The Boeing Company</u>				FIELD REP.: <u>J. Knightly</u>									
CONTRACTOR: <u>Cascade Drilling LP</u>				DATE STARTED: <u>5/17/17</u>									
DRILLER: <u>Jason Drake</u>				DATE FINISHED: <u>5/17/17</u>									
Elevation		ft. Datum		Boring Location: <u>Parkway bridge</u>									
Item	Casing	Sampler	Core Barrel	Rig Make & Model	Hammer Type								
Type				<input type="checkbox"/> Truck <input type="checkbox"/> Tripod <input type="checkbox"/> Cat-Head	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Bentonite								
Inside Diameter (in.)				<input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe <input type="checkbox"/> Winch	<input type="checkbox"/> Doughnut <input type="checkbox"/> Polymer								
Hammer Weight (lb.)				<input checked="" type="checkbox"/> Track <input type="checkbox"/> Air Track <input type="checkbox"/> Roller Bit	<input type="checkbox"/> Automatic <input type="checkbox"/> None								
Hammer Fall (in.)				<input type="checkbox"/> Skid <input checked="" type="checkbox"/> Soudc <input type="checkbox"/> Cutting Head	Drilling Notes:								
Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density, consistency, color, GROUP NAME & SYMBOL, maximum particle size, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse % Fine	Sand % Coarse % Medium % Fine	Field Test Dilatancy Toughness Plasticity Strength			
0		05 ppm					Pavement & gravel						
1349		012 ppm						dark brown silty clay, moist, stiff, plastic, no noticeable odor, some Fe mottling					
1351		1.0 ppm						gray / brown mottled silt with clay, moist, very moist, medium stiff, med plastic					
		2.1 ppm						very soft, moist to very moist, soft-slightly stiff, slightly plastic, no noticeable odor, becomes more stiff					
		0.5 ppm											
10		0.0 ppm						brown clay / weathered shale, some Fe-nodules (small, < 3mm dia water), becomes very wet					
1353		4.1 ppm											
		1.3 ppm						silt with minor clay, non to slightly plastic, no noticeable odor					
15		1.2 ppm						@ 12.5' gray weathered limestone, becomes more competent with depth					
1410		0.3 ppm						@ 13.5' silty clay / weathered shale, brown, moist to wet, locally soft, slightly plastic, no noticeable odor					
1414		0.2 ppm					@ 14' brown / yellow weathered sandy shale, some fossils, moist, medium stiff, medium plastic, no noticeable odor						
		3.3 ppm					grades to brown / yellow weathered sandstone, moist, competent, pieces, no noticeable odor						
20		16.7 ppm					grades to tan / gray weathered siltstone / sandstone						
1449		15.1 ppm					gray laminated shale, damp-dry, competent, no noticeable odor, stiff, hard, water noted on drill stem						
1448							brown silty clay / unweathered shale, free water @ 23 ft, soft, non-plastic, no noticeable odor						
25							gray, competent limestone, fossiliferous						
1206							Bottom of boring = 25'						
Water Level Data: Date _____ Time _____ Elapsed Time (hr.) _____ Depth in feet to: Bottom of Casing _____ Bottom of Hole _____ Water _____													
Sample ID: O - Open End Rod, T - Thin Wall Tube, U - Undisturbed Sample, S - Split Spoon Sample, G - Geoprobe				Well Diagram: <input checked="" type="checkbox"/> Riser Pipe, <input type="checkbox"/> Screen, <input type="checkbox"/> Filter Sand, <input type="checkbox"/> Cuttings, <input type="checkbox"/> Grout, <input type="checkbox"/> Concrete, <input checked="" type="checkbox"/> Bentonite Seal		Summary: Overburden (Linear ft.) _____, Rock Cored (Linear ft.) _____, Number of Samples _____, BORING NO. _____							
Field Tests		Dilatancy: R - Rapid S - Slow N - None			Plasticity: N - Nonplastic L - Low M - Medium H - High			Toughness: L - Low M - Medium H - High			Dry Strength: N - None L - Low M - Medium H - High V - Very High		
NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.													
NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.													

JAN 31 2019

KS GEOLOGICAL SURVEY