

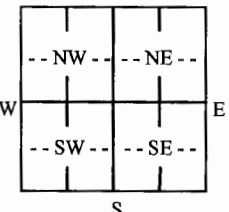
WATER WELL RECORD Form WWC-5

Division of Water Resources App. No. Well ID **MW-49B**

Original Record Correction Change in Well Use

1 LOCATION OF WATER WELL: County: **Johnson** Fraction **SE 1/4 SE 1/4 NW 1/4 1/4** Section Number **36** Township Number **T 13 S** Range Number **R 23 E W**

2 WELL OWNER: Last Name: **The Boeing Company** 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:
 Business: **The Boeing Company** Address: **P.O. Box 7730 MC K29-29** Corner of Lane St and Ocheltree St
 Address: City: **Wichita** State: **KS** ZIP: **66210**

3 LOCATE WELL WITH "X" IN SECTION BOX: 

4 DEPTH OF COMPLETED WELL: **20** ft. **5 Latitude:** **38°52'36.6562"** (decimal degrees)
 Depth(s) Groundwater Encountered: 1) **10** ft. **Longitude:** **094°48'25.7494"** (decimal degrees)
 2) ft. 3) ft. or **Dry Well** (KGS) **Horizontal Datum:** WGS 84 NAD 83 NAD 27
 WELL'S STATIC WATER LEVEL: **5.07** ft. Source for Latitude/Longitude:
 GPS (unit make/model:)
 Land Survey Topographic Map
 Online Mapper:
 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.

6 Elevation: **1045.42** ft. Ground Level TOC
 Source: Land Survey GPS Topographic Map
 Other

7 WELL WATER TO BE USED AS:

1. Domestic: Household Lawn & Garden Livestock Irrigation Feedlot Industrial

2. Public Water Supply: well ID

3. Dewatering: how many wells?

4. Aquifer Recharge: well ID

5. Monitoring: well ID **MW-49B**

6. Environmental Remediation: well ID

7. Air Sparge Soil Vapor Extraction

8. Recovery Injection

9. Oil Field Water Supply: lease

10. Test Hole: well ID

11. Cased Uncased Geotechnical

12. Geothermal: how many bores?

13. a) Closed Loop Horizontal Vertical

14. b) Open Loop Surface Discharge Inj. of Water

15. 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 **20** ft., Diameter in. to ft., Diameter in. to ft.
 Casing height above land surface **0.31** 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 **10** ft. to **20** ft., From ft. to ft., From ft. to ft.
 GRAVEL PACK INTERVALS: From **8** 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 **8** 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? **~800** ft.

10 FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	1	Asphalt and gravel	24.5	25	Competent limestone
1	2	Silty clay			
2	7	Clay			
7	9	Silty clay			
9	11	Silt with clay			
11	14	Silty weathered shale			
14	17.5	Competent limestone			
17.5	20	Silty weathered shale			
20	24.5	Competent shale			

Notes:

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) **5/18/17** 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-49B													
						Page 1 of 1													
PROJECT		Former Chemical Commodities, Inc. Site				H&A FILE NO. 129498-002													
LOCATION		Olathe, KS				PROJECT MGR. Michael Basel													
CLIENT		The Boeing Company				FIELD REP. J. Knightly													
CONTRACTOR		Cascade Drilling LP				DATE STARTED 5/18/17													
DRILLER		Jason Drabek				DATE FINISHED 5/18/17													
Elevation		ft. Datum		Boring Location															
Item		Casing		Sampler		Core Barrel													
Type						Rig Make & Model													
Inside Diameter (in.)						<input type="checkbox"/> Truck <input type="checkbox"/> Tripod <input type="checkbox"/> Cat-Head <input type="checkbox"/> ATV <input type="checkbox"/> Geoprobe <input type="checkbox"/> Winch <input checked="" type="checkbox"/> Track <input type="checkbox"/> Air Track <input type="checkbox"/> Roller Bit <input type="checkbox"/> Skid <input checked="" type="checkbox"/> Sonic <input type="checkbox"/> Cutting Head													
Hammer Weight (lb.)						Hammer Type: <input type="checkbox"/> Safety <input type="checkbox"/> Doughnut <input type="checkbox"/> Automatic Drilling Mud: <input type="checkbox"/> Bentonite <input type="checkbox"/> Polymer <input type="checkbox"/> None													
Hammer Fall (in.)						Casing Advance: _____ Type Method Depth: _____													
						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		Sand		Field Test			
							% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Dilatancy	Toughness	Plasticity	Strength			
0							Asphalt + Gravel												
		9.6 ppm					Dark gray/brown silty clay												
		6.2 ppm					gray clay, moist, stiff, plastic, no noticeable odor												
5		8.3 ppm					becomes softer to soft to medium stiff, medium plastic												
		11.2 ppm					Brown silty clay, moist, stiff, plastic, some Fe-mottling												
		10.2 ppm					becomes hard												
10		14.2 ppm					Dark gray/brown silt with clay, very moist, soft silt, stiff, slightly plastic, no noticeable odor												
		9.6 ppm					Brown silty, weathered shale, moist, stiff, plastic, Fe-nodules, no obvious structure												
		12.6 ppm					Brown/reddish tan/grey limestone, competent, few fossils but present												
15		9.7 ppm					Brown tan silty weathered shale, dry/moist to medium stiff where unbroken, sandstone-like in places (fine sand)												
		11.7 ppm					Gray fissile shale, competent, damp, moist, no noticeable odor												
		12.6 ppm					less fissile with depth												
20		8.3 ppm					very wet @ 23.5 ft												
							Brown/grey competent limestone												
25							Bottom of boring - 25'												

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Water Level Data				Sample ID		Well Diagram		Summary									
Date	Time	Elapsed Time (hr.)	Depth in feet to:			O	T	U	S	G	<input type="checkbox"/> Filter Pipe <input type="checkbox"/> Screen <input type="checkbox"/> Filter Sand <input type="checkbox"/> Cuttings <input type="checkbox"/> Grout <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Seal	Overburden (Linear ft.) _____		Rock Cored (Linear ft.) _____		Number of Samples _____	
			Bottom of Casing	Bottom of Hole	Water							BORING NO. _____					
Field Tests		Dilatancy: R - Rapid S - Slow N - None			Plasticity: N - Nonplastic L - Low M - Medium H - High			Dry Strength: N - None L - Low M - Medium H - High V - Very High									
		Toughness: L - Low M - Medium H - 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.										RECEIVED							

JAN 31 2019