

MW 195

WATER WELL RECORD

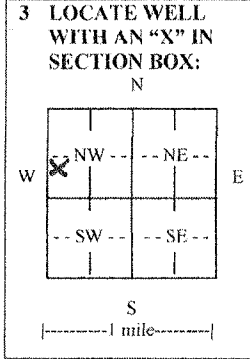
Form WWC-5

Division of Water Resources App. No.

1 LOCATION OF WATER WELL: County: FORD	Fraction SE 1/4 SE 1/4 NW 1/4 1/4	Section Number 22	Township No. T 26 S	Range Number R 24 <input type="checkbox"/> E <input checked="" type="checkbox"/> W
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Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here Global Positioning System (GPS) information:
 Latitude: (in decimal degrees)
 Longitude: (in decimal degrees)
 Elevation:
 Datum: WGS 84, NAD 83, NAD 27
 Collection Method:
 GPS unit (Make/Model:)
 Digital Map/Photo, Topographic Map, Land Survey
 Est. Accuracy: <3 m, 3-5 m, 5-15 m, >15 m

2 WATER WELL OWNER:
 RR#, Street Address, Box #: **KUCH NITROGEN 11559 Hwy 50**
 City, State, ZIP Code : **DODGE CITY KS 67801**



4 DEPTH OF COMPLETED WELL **134'** ft.
 Depth(s) Groundwater Encountered (1) **134'** ft. (2)..... ft. (3)..... ft.
 WELL'S STATIC WATER LEVEL..... ft. below land surface measured on mo/day/yr.....
 Pump test data: Well water was..... ft. after..... hours pumping..... gpm
 EST. YIELD..... gpm. Well water was..... ft. after..... hours pumping..... gpm
 Bore Hole Diameter **6"** in. to **134'** ft., and in. to ft.
 WELL WATER TO BE USED AS: Public water supply Geothermal Injection well
 Domestic Feedlot Oil field water supply Dewatering Other (Specify below)
 Irrigation Industrial Domestic-lawn & garden Monitoring well
 Was a chemical/bacteriological sample submitted to Department? Yes No
 If yes, mo/day/yr sample was submitted.....
 Water well disinfected? Yes No

5 TYPE OF CASING USED: Steel PVC Other
 CASING JOINTS: Glued Clamped Welded Threaded
 Casing diameter **2"** in. to **129'** ft., Diameter in. to ft., Diameter in. to ft.
 Casing height above land surface **36"** in., Weight **0.682** lbs./ft., Wall thickness or gauge No. **54.40**
 TYPE OF SCREEN OR PERFORATION MATERIAL:
 Steel Stainless Steel PVC Other (Specify)
 Brass Galvanized Steel None used (open hole)
 SCREEN OR PERFORATION OPENINGS ARE:
 Continuous slot Mill slot Gauze wrapped Torch cut Drilled holes None (open hole)
 Louvered shutter Key punched Wire wrapped Saw cut Other (specify)
 SCREEN-PERFORATED INTERVALS: From **134'** ft. to **129'** ft., From ft. to ft.
 From ft. to ft., From ft. to ft.
 GRAVEL PACK INTERVALS: From **134'** ft. to **127'** ft., From ft. to ft.
 From ft. to ft., From ft. to ft.

6 GROUT MATERIAL: Neat cement Cement grout Bentonite Other
 Grout Intervals: From **124'** ft. to **0'** ft., From ft. to ft., From ft. to ft.
 What is the nearest source of possible contamination:
 Septic tank Lateral lines Pit privy Livestock pens Insecticide storage Other (specify below)
 Sewer lines Cesspool Sewage lagoon Fuel storage Abandoned water well
 Watertight sewer lines Seepage pit Feedyard Fertilizer storage Oil well/gas well **Chemical PLANT**
 Direction from well **WEST OF PLANT** Distance from well **> 1000**

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	3	Topsoil	86	95	Sand w/ clay & silt
3	35	clay	95	102	Silty clay
35	39	Silt & clay	102	111	clay
39	49	clay	111	119	Sandy silt
49	55	caliche	119	122	Sandy clay
55	58	clay	122	135	Sand
58	65	Caliche w/ sand			
65	75	sand w/ silt			
75	81	silt w/ clay			
81	86	Silt			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed, or plugged under my jurisdiction and was completed on (mo/day/year) **07/13/11** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. **793** This Water Well Record was completed on (mo/day/year) **09/19/11** under the business name of **Cahoy Pump Service, Inc.** by (signature) **Darin J. Cahoy**

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks and check the correct answers. Send three copies (white, blue, pink) to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5522. Send one copy to WATER WELL OWNER and retain one for your records. Include fee of \$5.00 for each constructed well. Visit us at <http://www.kdheks.gov/waterwell/index.html>.

KSA 82a-1212 Check: White Copy, Blue Copy, Pink Copy

Original Returned to Sender
 for Correction Date: **9-26-11**

Borehole No. MW-19S

Borehole Log

Project No.:	TXR0118	Location:	Dodge City, KS
Client:	Koch Nitrogen Company	Coordinates:	Not Yet Surveyed
Logged By:	Alex Rivera	Borehole Diameter:	6 inch
Drilling Company:	Major Drilling	Site Datum:	
Drilling Method:	Rotosonic	Ground Surface Elevation:	Not Yet Surveyed
Well Material:	Not Applicable	Top PVC Casing Elevation:	
		Completion Date:	13 July 2011

Depth (ft)	Water Level (ft)	Stratigraphy	Lithologic Description	Geologic Samples					Well Configuration	Comments
				Unified Soil Classification	Recovery (%)	Blowcount	PID (ppmv)	Soil Sample ID		
0			Topsoil, brown, dry, loose							
5			Clay, trace caliche, dark brown to brown, dry, very stiff, low plasticity		NA					← Grout (0-122 ft bgs)
10										
15			Brown, moist, soft to firm, low to medium plasticity							
20			Dry, firm, low plasticity	CL						
25			Trace caliche, firm to stiff							
30			Some silts		NA					
35			Trace caliche, very stiff							
35			Silt and clay, brown, dry, soft	CL ML						
40			Clay, some silts, dry, stiff, low plasticity							
45			Trace caliche, light brown	CL	NA					
50			Trace very fine sands							
50			Caliche, some clays, white, dry, firm							
55			Clay, pale brown, moist, soft, high plasticity	CH						
60			Caliche, some clays, pale brown, dry, firm							
60			Poorly graded sand with silt, light brown, dry, fine to very fine sands, some cementation	SP SM						
65			Caliche, sandy, white to pale brown, dry, hard							
65			Poorly graded sand with silt, some caliche, light to pale brown, dry, fine to very fine sands, moderate cementation	SP SM	NA					

Report: MASTER (TR0196). File: C:\USERS\ARIVERA\DESKTOP\KANSAS\KCOCH.GPJ. 7/19/2011

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Drilling Method: Rotosonic	Ground Surface Elevation: Not Yet Surveyed
Well Material: Not Applicable	Top PVC Casing Elevation:
	Completion Date: 13 July 2011

Depth (ft)	Water Level (ft)	Stratigraphy	Lithologic Description	Geologic Samples					Well Configuration	Comments
				Unified Soil Classification	Recovery (%)	Blowcount	PID (ppmv)	Soil Sample ID		
75			Silt and clay, trace very fine sands, brown, moist, soft	SP SM						
80			Silt, trace clays, tan brown, moist, firm	CL ML						
85			Poorly graded sand with silt, brown, moist, loose, fine sands	SP SM	NA					
90			Clay and silt, some fine gravel caliche, brown, dry, stiff	CL ML						
95			Caliche clay, pale brown, dry, firm, low plasticity	CL ML						
100			Clay and silt, some fine gravel caliche, light brown to medium brown, dry, firm	CL ML						
105			Silt with clay, some caliche, brown, firm, dry	ML CL						
110			Clay, some silts, trace caliche, light brown, dry, stiff, low plasticity	CL ML						
115			Silt and clay, trace caliche, light brown, moist, firm Medium brown, moist to dry Trace fine gravel caliche, light pinkish brown	CL ML						
120			Clay, 40% silts, trace fine gravel caliche, light pinkish brown, moist to dry, firm, low plasticity	CL	NA					
125			Some silts, light to pale brown, dry	ML						
130			Sandy silt, light to medium brown, dry, firm, fine to very fine sands	CL						
135			Light brown, moist, soft	SP						
			Sandy clay, trace silts, light brown, moist to dry, firm, low plasticity							
			Poorly graded sand, some clays, light brown, dry, fine to very fine sands, some cementation							
			Borehole depth 135.0 ft							

Report: MASTER (TR0196): File: C:\USERS\ARIVERA\DESKTOP\KANSAS\KCOCH.GPJ: 7/19/2011

← Bentonite pellet seal

← 5-ft well screen from 129-134 ft bgs; silica sand filter pack