

MW 183

**WATER WELL RECORD**

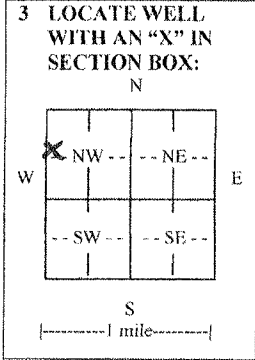
**Form WWC-5**

Division of Water Resources App. No.

1 **LOCATION OF WATER WELL:** County: **FORD** Fraction: **SE 1/4 SE 1/4 NW 1/4** Section Number: **22** Township No.: **T 26 S** Range Number: **R 24 E**

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:** **KOCH NITROGEN**  
 RR#, Street Address, Box #: **11559 HWY 50**  
 City, State, ZIP Code: **DODGE CITY KS 67801**



4 **DEPTH OF COMPLETED WELL** **124'** ft.  
 Depth(s) Groundwater Encountered (1) **UNK/180** 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 **124"** 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 **119"** 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. **SCH 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 **124'** ft. to **119'** ft., From ..... ft. to ..... ft.  
 From ..... ft. to ..... ft., From ..... ft. to ..... ft.  
 GRAVEL PACK INTERVALS: From **124'** ft. to **117'** 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 **119'** 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 .....  
 Direction from well ..... Distance from well .....

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	4	Topsoil	115	120	Sandy clay
4	15	clay	120	125	Silt w/ sand
15	52	clay			
52	55	caliche			
55	60	clay			
60	62	caliche			
62	75	Sand			
75	80	Sandy silt			
80	97	clay w sand & silt			
97	115	clay w/ caliche			

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) **07/14/11** 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 **CANDY PUMP SERVICE, LTD.** by (signature) *[Signature]*

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>.

**Borehole No. MW-18S**

**Borehole Log**

<b>Project No.:</b>	TXR0118	<b>Location:</b>	Dodge City, KS
<b>Client:</b>	Koch Nitrogen Company	<b>Coordinates:</b>	Not Yet Surveyed
<b>Logged By:</b>	Alex Rivera	<b>Borehole Diameter:</b>	6 inch
<b>Drilling Company:</b>	Major Drilling	<b>Site Datum:</b>	
<b>Drilling Method:</b>	Rotosonic	<b>Ground Surface Elevation:</b>	Not Yet Surveyed
<b>Well Material:</b>	Not Applicable	<b>Top PVC Casing Elevation:</b>	
		<b>Completion Date:</b>	14 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		
			Topsoil, brown, dry, loose							
5			Clay, brown, dry, firm, low plasticity 10-30% caliche Very stiff	CL	NA					← Grout (0-111 ft bgs)
10			Trace caliche, stiff							
15			Clay, brown, moist, firm, high plasticity	CH						
20			Clay, trace caliche, brown, dry, hard, low plasticity							
25			Some caliche, very stiff	CL	NA					
30			Hard							
35			Trace silts, trace sands, pale brown, moist, soft	CH	NA					
40			Clay, trace fine gravel caliche, light brown, moist, soft, high plasticity							
45			20% caliche, light grayish green	CL						
50			Caliche and clay, some sands, pale brown, dry, firm							
55			Clay, some caliche, trace sands, pale brown, dry, very stiff, low plasticity	CL						
60			Caliche, some clays, pale brown, dry, firm							
			Poorly graded sand, some caliche, trace clays, light grayish brown, dry, stiff, some cementation	SP						

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

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<b>Well Material:</b> Not Applicable	<b>Top PVC Casing Elevation:</b>
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Depth (ft)	Water Level (ft)	Stratigraphy	Lithologic Description	Geologic Samples					Well Configuration	Comments
				Unified Soil Classification	Recovery (%)	Blowcount	PID (ppmv)	Soil Sample ID		
70			30% caliche, pale brown	SP	NA					
75			Sandy silt, trace clays, brown, dry, firm	ML						
80			Clay with silt, some fine sands, light brown, dry, low plasticity	CL ML	NA					
85			Clay, trace silts, brown, dry, firm, low plasticity	CH						
90			Clay and silt, some fine sands, light brown, dry, firm	CL ML						
95			Sandy clay, brown, dry, firm, medium plasticity, very fine to fine sands	CL						
			Silt with clay, light brown, firm, dry, low plasticity clays	ML						
100			Caliche, some clays, white, dry, firm							
105			Clay with caliche, pale brown, dry, stiff, medium plasticity							
110			White to pale brown, dry, firm, low plasticity	CL	NA					
115			Sandy clay, trace fine gravel caliche, light brown, moist to dry, firm, low plasticity, very fine to fine sands	CL						
120			Sand with silt, brown, dry, firm, very fine sands	SP SM	NA					
			Silt with sand, some clays, brown, moist, soft	ML						
125			Borehole depth 125.0 ft							

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

← Bentonite pellet seal

← 5-ft well screen from 119-124 ft bgs; silica sand filter pack