

MW 26

WATER WELL RECORD

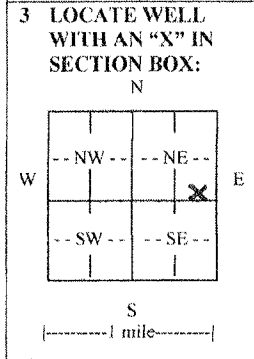
Form WWC-5

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

Street/Rural Address of Well Location; if unknown, distance & direction from nearest town or intersection: If at owner's address, check here [X] Global Positioning System (GPS) information: Latitude: Longitude: Elevation: Datum: Collection Method: Est. Accuracy:

2 WATER WELL OWNER: KOCH NITROGEN RR#, Street Address, Box #: 1559 Hwy 50 City, State, ZIP Code: DORGE CITY KS 67801



3 LOCATE WELL WITH AN 'X' IN SECTION BOX: 4 DEPTH OF COMPLETED WELL: 172' Depth(s) Groundwater Encountered (1) 155' ft. (2) ft. (3) ft. WELL'S STATIC WATER LEVEL: Pump test data: EST. YIELD: Bore Hole Diameter: WELL WATER TO BE USED AS: Was a chemical/bacteriological sample submitted? Water well disinfected?

5 TYPE OF CASING USED: Steel [X] PVC [X] Other CASING JOINTS: Glued [X] Clamped [X] Welded [X] Threaded [X] Casing diameter: 2" in. to 167' ft. Casing height above land surface: 36" in. TYPE OF SCREEN OR PERFORATION MATERIAL: SCREEN OR PERFORATION OPENINGS ARE: SCREEN-PERFORATED INTERVALS: GRAVEL PACK INTERVALS:

6 GROUT MATERIAL: Neat cement [X] Cement grout [X] Bentonite [X] Other Grout Intervals: What is the nearest source of possible contamination: Direction from well: SOUTH OF PLANT Distance from well: 2.1000'

Table with columns: FROM, TO, LITHOLOGIC LOG, FROM, TO, LITHO. LOG (cont.) or PLUGGING INTERVALS. Rows include Topsoil, Clay, Sand, clayed sand, Sandy caliche, clayed sand, clay, sand, Clay w/ silt, sand, Clay w/ caliche stringer, Sand.

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was [X] constructed, [] reconstructed, or [] plugged under my jurisdiction and was completed on (mo/day/year) 04/07/2011... This Water Well Record was completed on (mo/day/year) 09/19/2011... under the business name of Canoy Pump Service, Inc. by (signature) Darwin Canoy

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: [X] White Copy, [] Blue Copy, [] Pink Copy

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

Borehole No. MW-26

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: 7 June 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, moist							
5			Clay, brown, moist, firm, low plasticity 30% caliche clay	CL	100					← Grout (0-159 ft bgs)
10			10% caliche clay							
15			Dark brown, high plasticity	CH	80					-Drilling fluid return observed from 15-75 ft bgs
20			Brown, low to medium plasticity, trace caliche							
30			Pale brown to white, dry, low plasticity, 40% caliche	CL						-Hard drilling from 30-33 ft bgs
35			High plasticity, moist, soft, high plasticity, few sands	CH						
40			Clay with sand, pale brown, moist, some silts, 20% caliche	CL						
45			Poorly graded sand with silt, medium brown, moist to dry, hard, very fine sands, slightly cementitious, trace fine gravel, few pockets of gray clay	SP SM	75					
50			Poorly graded sand with caliche, white, dry, trace clays, trace fine gravel Medium brown, moist to dry, hard, very fine sands, slightly cementitious, trace fine gravel, few pockets of gray clay Light brown to medium brown							
55			Medium brown							
			Caliche clay, pale brown to white, moist to dry, low plasticity, stiff	CL						

Report: MASTER (TR01196); File: C:\USERS\ARIVERA\DESKTOP\KANSAS\KCOCH.GPJ; 7/19/2011

Borehole No. MW-26

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:	7 June 2011

Depth (ft)	Water Level (ft)	Stratigraphy	Lithologic Description	Geologic Samples				Well Configuration	Comments
				Unified Soil Classification	Recovery (%)	Blowcount	PID (ppmv)		
65			Caliche, white, dry	CL	100				
			Clay with sand, medium brown to pale brown, moist to dry, medium plasticity	CL					
			Caliche with clay, pale brown, dry, very hard	SP					
			Poorly graded sand with clay, medium brown, dry, very fine sands, cementitious	SC					
70			Caliche with clay, pale brown, dry, very hard	CL	100				
			Sandy clay, tan, dry, very hard, low plasticity, cementitious, few silts						
75			Poorly graded sand with silt, medium brown, moist, fine to very fine sands	SP SM					
80			Clay with silt, tan with grayish green, dry, very hard, cementitious, trace caliche	CL					
85			Poorly graded sand, medium brown, moist, fine to very fine sands, trace silts	SP	100				
			Clay, tan to greenish gray, dry, very hard, low plasticity, trace caliche	CL					
90				CL	100				
			Caliche with clay, pale brown to white, dry, hard						
			Clay, tan to greenish gray, dry, very hard, low plasticity, trace caliche						
95			Sandy clay, pale brown, moist, soft, medium plasticity	CL	100				
			Low plasticity, trace caliche, few medium brown lense						
100									
105			Poorly graded sand with silt, pale brown, moist, loose, fine to very fine sands, pockets of gray clay	SP SM	100				
			Sandy caliche, white to pale brown, dry, fine gravel						
110				SP					
			Poorly graded sand, pale brown, moist to dry, fine to very fine sands, trace silts, trace caliche						
115			Clayey sand, light brown, moist, fine sands	SC					

Report: MASTER (TR0198); File: C:\USERS\ARIVERA\DESK\TOPKANSAS\KCOCH.GPJ; 7/19/2011

- Hard drilling; moderate rig chatter from 75-80 ft bgs

Borehole No. MW-26

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: 7 June 2011

Depth (ft)	Water Level (ft)	Stratigraphy	Lithologic Description	Geologic Samples				Well Configuration	Comments
				Unified Soil Classification	Recovery (%)	Blowcount	PID (ppmv)		
125				SC	100				-Drilling fluid return observed from 115-135 ft bgs
130			Sandy caliche, white to pale brown, dry, hard, cementitious						
135			Moist Clayey sand, medium brown, moist to dry, fine to very fine sands, few silts, trace fine gravel caliche	SC					-Hard drilling from 135-145 ft bgs
140			Clay, brown, moist to dry, firm, high plasticity, trace very fine sands, trace fine gravel caliche	CH					
145			Some fine gravel red claystone		100				
150			Dark orange, low plasticity, trace caliche						
155			Claystone, pale orange	CL					-Hard drilling; moderate rig chatter from 149-155 ft bgs
160			Dark orange, some silts, trace silts						
165			Poorly graded sand, grayish brown, wet, fine to very fine sands, few silts		100				
170			Moist, some silts Pale brown, moist	SP					Bentonite pellet seal
175			Clayey sand, medium brown, moist, fine to very fine sands, some silts	SC	100				
			Poorly graded sand, light brown, wet, fine to very fine sands, trace silts	SP					
			Sandstone, medium brown, dry, very hard		100				5-ft well screen from 167-172 ft bgs; silica sand filter pack
			Some shale, very light gray, dry, very hard, coarse gravel						Bentonite pellet backfill Hard drilling; significant rig chatter from 170-175 ft bgs
			Borehole depth 175.0 ft						

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