

MW 235

WATER WELL RECORD

Form WWC-5

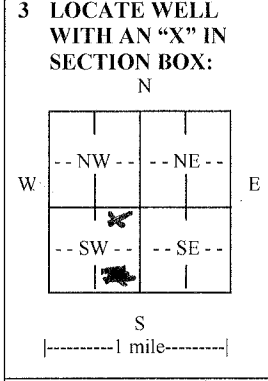
Division of Water Resources App. No.

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 #: **KOCH NITROGEN**
 City, State, ZIP Code : **11559 Hwy 50 DOGE CITY KS 67801**



4 DEPTH OF COMPLETED WELL **147'** ft.

Depth(s) Groundwater Encountered (1)..... **146'** 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 **147'** 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 **142'** ft., Diameter in. to ft.
 Casing height above land surface..... **36"** in., Weight **0.682** lbs./ft., Wall thickness or gauge No. **SC440**

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..... **147'** ft. to **142'** ft., From ft. to ft.
 From..... ft. to ft., From ft. to ft.

GRAVEL PACK INTERVALS: From..... **147'** ft. to **140'** 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 **137'** 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 **SOUTH OF PLANT** Distance from well **>1000'**

FROM	TO	LITHOLOGIC LOG	FROM	TO	LITHO. LOG (cont.) or PLUGGING INTERVALS
0	4	Topsoil	90	93	clay & silt
4	35	clay	93	115	silt & clay
35	45	silty clay	115	118	silt w/ sand
45	52	clay	118	125	clay
52	57	clay & silt	125	134	silty sand
57	62	clay	134	136	clay w/ silt
62	68	caliche	136	142	silt
68	78	sandy silt	142	144	clay & silt
78	87	clay & silt	144	147	Sand
87	90	sand w/ 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) **06/28/11**..... 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 **Cahay Pump Service Inc**..... by (signature) **Dan J. Cahay**.....

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>.

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

Borehole No. MW-23S

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:	28 June 2011

Depth (ft)	Water Level (ft)	Stratigraphy	Lithologic Description	Geologic Samples				Well Configuration	Comments
				Unified Soil Classification	Recovery (%)	Blowcount	PID (ppmv)		
0-5			Topsoil, brown, dry, loose						
5-15			Clay, trace caliche, dark brown, moist to dry, firm, stiff, low plasticity		NA				← Grout (0-134 ft bgs)
15-25			5-10% caliche, some silts	CL					
25-35					NA				
35-45			Silty clay, trace fine gravel caliche, brown, moist to dry, firm, low plasticity	CL ML					
45-50			Clay, trace silts, brown, moist, soft to firm, high plasticity		NA				
50-55			Clay and silt, brown, moist to dry, firm, low plasticity	CL ML					
55-60			Clay, brown, dry, hard, low plasticity	CL					

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Borehole No. MW-23S

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:	28 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		
65			Caliche clay, light brown to white, dry, firm, low plasticity	CL	NA					
			Caliche, white, dry							
70			Sandy silt, brown, dry, soft, fine to very fine sands	ML	NA					
75										
80			Clay and silt, trace fine gravel caliche, brown, moist to dry, firm, low plasticity	CL ML	NA					
85										
90			Poorly graded sand with silt, trace fine gravel siltstone, trace clays, brown, moist to dry, firm, fine to very fine sands	SP SM	NA					
			Clay and silt, trace fine gravel caliche, brown, moist to dry, firm, low plasticity	CL ML						
95			Silty clay, some very fine sands, brown, moist to dry, firm, low plasticity	CL	NA					
			Silt and clay, trace very fine sands, brown, moist to dry, firm, low plasticity							
100					NA					
105				CL ML						
110					NA					
			Silt with sand, trace clays, pale brown to brown, dry, fine to medium sands	ML						
115			Clay, trace fine gravel caliche, trace silts, pale brown to light gray, moist to dry, medium plasticity	CL						

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Borehole No. MW-23S

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:	28 June 2011

Depth (ft)	Water Level (ft)	Stratigraphy	Lithologic Description	Geologic Samples				Well Configuration	Comments
				Unified Soil Classification	Recovery (%)	Blowcount	PID (ppmv)		
125			Silty sand, light brown to pale brown, moist to dry, fine to very fine sands	CL	NA				
130			Trace fine gravel caliche, trace clays	SM					
135			Clay with silt, trace fine gravel caliche, light brown, dry, soft, low plasticity	CL ML					
140			Silt, trace clays, medium brown, moist to dry, soft	ML					Bentonite pellet seal
145			Clay and silt, trace fine gravel caliche, dark yellowish gray, dry, firm, medium plasticity	CL ML					
145			Poorly graded sand, trace silts, brown, wet, very fine to fine sands, cementitious	SP	NA				5-ft well screen from 142-147 ft bgs; silica sand filter pack
147.0			Borehole depth 147.0 ft						
150									
155									
160									
165									
170									
175									

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