

OCT 11 2005

FOR KCC USE:

EFFECTIVE DATE: 10-22-05

DISTRICT # 1  
SGA?  Yes  No

State of Kansas

CATHODIC PROTECTION BOREHOLE INTENT CONSERVATION DIVISION

FORM MUST BE TYPED  
FORM MUST BE SIGNED  
ALL BLANKS MUST BE FILLED IN

Must be approved by the K.C.C. sixty (60) days prior to commencing well.

Expected Spud (Starting) Date 10-31-05  
month day year

APP W/2 W/2 W/2 SW Sec 1. Twp 33S, Rg 34W East

OPERATOR: License # 32782

Spot (Location) W/2 W/2 W/2 SW Sec 1. Twp 33S, Rg 34W East  
1372' feet from South / North line of Section  
215' feet from East / West line of Section  
(Circle directions from nearest outside corner boundaries)

Name: Duke Energy Field Services  
Address: Post Office Box 189  
City/State/Zip: Forgan, OK 73938

IS SECTION X REGULAR IRREGULAR?  
(Spot well on the Section Plat on Reverse Side)  
County: Seward

Contact Person: Larry Busby

Lease Name: IH-12 Well #: #2

Phone: (620) 482-3752

Facility Name: IH-12  
Ground Surface Elevation: 2850 MSL  
Cathodic Borehole Total Depth: 180 ft.  
Depth to Bedrock: 470 ft.

CONTRACTOR: License #: 32775

Name: McLean's C.P. Installation, Inc.

WATER INFORMATION:  
Aquifer Penetration:  None  Single  Multiple  
Depth to bottom of fresh water: 470 ft.  
Depth to bottom of usable water: 1000 ft.  
Water well within one-quarter mile:  Yes  No  
Public water supply well within one mile:  Yes  No  
Water Source for Drilling Operations:  
 well  farm pond  stream  other

Type Drilling Equipment:  Mud Rotary  Cable  
 Air Rotary  Other

CONSTRUCTION FEATURES

Length of Cathodic Surface (Non-Metallic) Casing  
Planned to be set: 20' ft.  
Length of Conductor pipe (if any?): 17 1/2" - 20' 10" - 160'  
Size of the borehole (I.D.): inches  
Cathodic surface casing size: 1.0" inches  
Cathodic surface casing centralizers set at depths of: 20';  
; ;

Water Well Location: .....  
DWR Permit #: .....  
Standard Dimension Ratio (SDR) is = 2.6  
(cathodic surface OD csg.in inches / MWT in inches = SDR)

Cathodic surface casing will terminate at:  
 Above surface  Surface Vault  Below Surface Vault

Annular space between borehole and casing will be grouted  
with:  Concrete  Bentonite Cement  
 Neat cement  Bentonite clay

Pitless casing adaptor will be used: Yes  No  at Depth ....ft.

Anode vent pipe will be set at: 3. ft. above surface

Anode installation depths are: 168', 148', 128', 108', 88'

Anode conductor (backfill) material TYPE: Carbo 60

NON-AQUIFER COMPLETION, BASE OF BORING MUST BE  
A MINIMUM OF 20 FEET ABOVE TOP OF GROUNDWATER(GW)  
DO NOT PENETRATE TOP OF GW.IF GW IS ENCOUNTERED  
THE BASE OF THE BORING MUST BE CHANGED (RJP/KCC)

Depth to BASE of Backfill installation material: 180'  
Depth to TOP of Backfill installation material: 20'

AFFIDAVIT

MAX TD = 180 (SEE NOTE)

The undersigned hereby affirms that the drilling, completion and eventual plugging of this well will comply with K.S.A. 55-101, et. seq. It is agreed that the following minimum requirements will be met:

1. Notify the appropriate district office prior to spudding of and again before plugging well;
2. A copy of the approved notice of intent to drill shall be posted on each drilling rig;
3. The minimum amount of cathodic surface casing as specified below shall be set by grouting to the top.
4. An agreement between the operator and the district office on plugs and placement is necessary prior to plugging;
5. The appropriate district office will be notified before well is either plugged or casing is grouted in;
6. IN ALL CASES, NOTIFY DISTRICT OFFICE PRIOR TO ANY PLUGGING.

I hereby certify that the statements made herein are true and to the best of my knowledge and belief.

Date: 10-10-05 Signature of Operator or Agent: Cindy Cowan Title: Office

FOR KCC USE:	175-22010600	Alt-3
API # 15-		
Conductor pipe required	NONE	feet
Minimum cathodic surface casing required	20	feet
Approved by:	RJP/10-17-05	
This authorization expires:	4-17-06	
(This authorization void if drilling not started within 6 months of effective date.)		
Spud date:		Agent:

REMEMBER TO:

- File Drill Pit Application (form CDP-1) with Intent to Install;
- File Completion Form CB-2 within 30 days of spud date;
- Notify appropriate district office 48 hours prior to workover or re-entry;
- Submit plugging report (CB-4) within 30 days after plugging is completed.

IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW

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CONSERVATION DIVISION  
WICHITA, KS

Show the relationship to other wells or facilities proposed to be serviced by the intended cathodic borehole. Please show all the wells, existing cathodic boreholes, pipelines or facilities within 1/2 mile of the proposed borehole.

API NO. 15- \_\_\_\_\_  
 OPERATOR Duke Energy Field Services  
 LEASE IH-12  
 WELL NUMBER #2  
 FACILITY NAME IH-12

LOCATION OF WELL: COUNTY Seward  
1372' feet from south north line of section  
215' feet from east west line of section  
 SECTION 1 TWP 33S RG 34W

SPOT: QTR/QTR/QTR/QTR OF ACREAGE  
 - SW - NW - SW

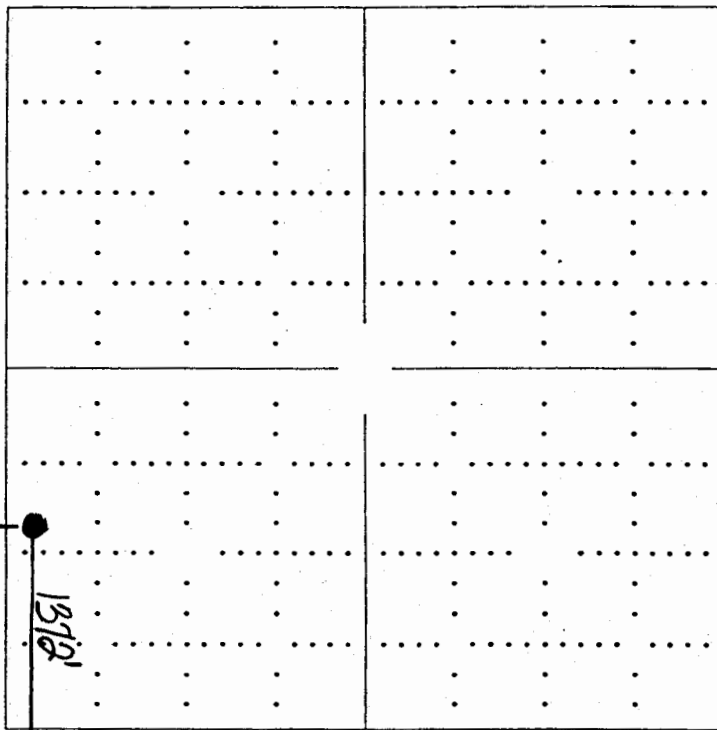
IS SECTION X REGULAR or \_\_\_\_\_ IRREGULAR  
IF SECTION IS IRREGULAR, LOCATE WELL FROM NEAREST CORNER BOUNDARY.

Section corner used: \_\_\_\_\_ NE \_\_\_\_\_ NW \_\_\_\_\_ SE \_\_\_\_\_ SW

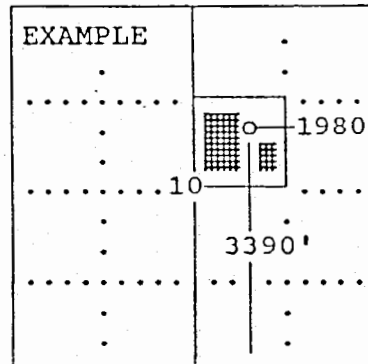
PLAT

(Show location of intended cathodic borehole.)

(Show footage from nearest lease, unit or outside section boundary line.)



Section 1



SEWARD CO.

In plotting the proposed location of the well, you must show:

- 1) The manner in which you are using the depicted plat by identifying section lines, i.e. 1 section, 1 section with 8 surrounding sections, 4 sections, etc.;
- 2) the distance of the proposed drilling location from the section's south/north and east/west; and
- 3) the distance to the nearest lease, unit or outside section boundary line.