KCC Dist 2

CB-1
GMD 2 Rev.

EQUUS BEDS GROUNDWATER MANAGEMENT DISTRICT NO. 2 99976

313 Spruce Street Halstead, Kansas 67056 (316) 835-2224

15-155-21560-0000
7-12-2010
CPB #65

FORM CP-15
APPLICATION FOR PERMIT TO DRILL AND CONSTRUCT AN UNCASED CATHODIC PROTECTION BOREHOLE

Permit Application Number CPB-65

To the Equus Beds Groundwater Management District No. 2:

Comes now the Applicant Hayse Management Services for Blackhills Corp.
Whose Address is
PO Box 107 (P.O. Box or Street) Mullinville (City) Kansas (State) 67109 (Zip Code)
Telephone No. 620 (Area Code) 548-2369 (Telephone)

And makes application to the Equus Beds Groundwater Management District No. 2 for a permit to drill and construct a cathodic protection borehole in and through the Equus Beds aquifer in the county of Reno, State of Kansas, to the extent and in accordance with the following:

1. The location of the proposed cathodic protection borehole is in the ~~NW~~ NE quarter of the NW ~~NE~~ quarter of the NW quarter of Section 15, Township 23, south, Range 6 west and more particularly described as being near a point 5230 feet north and ~~4380~~ 1740 feet west of the apparent southeast corner of said section. (80 ft west 50 ft south from the corner of 4th & Westland, Hutchinson, Ks) #2

T Boese GMD2 per D. & Hayse

2. The proposed use of the cathodic protection borehole is to provide cathodic protection of the applicant's Gas Distribution Main facility from electrochemical corrosion.

3. The land surface elevation is ~~1536~~ 1541 T. Boese GMD2 per D. & Hayse feet above mean sea level and the method of measurement used was (b) topographic map _____.

4. The depth to surface or top of bedrock or shale is 65 +/- feet below land surface.

5. The depth to the water table of the fresh water aquifer is 12 feet below land surface.

6. Aquifer salinity as indicated by chloride concentration is 145 mg/L and was determined by (a) published report _____.

7. The total depth of the cathodic protection borehole will not penetrate the bedrock surface and will be completed 65 +/- feet below land surface.

8. The diameter of the uncased cathodic protection borehole will be a minimum of 8 inches.

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EBGWMD2 Form CP-15

15-155-21560-0000

9. Non toxic anodes that meet or exceed the American Water Works Association standards for use in public water supply systems and adopted through K.A.R. 82-3-707 will be installed beginning at a depth of __20____ feet below land surface to a total depth of ~~65~~ 60 feet below land surface. T. Boese per application - illustration & D. le Hayse

10. Anode conductor grout that is certified by the National Sanitation Foundation to meet the American National Standards Institute Standard 60 for use in drinking water treatment chemicals and adopted through K.A.R. 82-3-707 will be installed beginning at a depth of __9__ feet below land surface. To a total depth of 65 feet below land surface. T. Boese, GMD2, from applicant Illustration

11. The uncased borehole from the top of the anode conductor grout will be grouted with (c) bentonite clay grout from a total depth of ____9__ feet below land surface to ___3____ feet below land surface.

12. The grouted uncased borehole will be backfilled with clean compacted topsoil from ___3____ feet below land surface to ____0___ feet above land surface.

13. Will the use of a drilling pit threaten to contaminate fresh and usable groundwater? _____ Yes ___X___ No. If Yes, complete sections (a) and (b). Circle one: (a) the pit will be: (i) constructed so that the bottom and side have a hydraulic conductivity no greater than 1 x 10^{-7} cm/sec., (ii) constructed above ground, or (iii) a portable above ground tank, and (b) the applicant has submitted a surface pond application to the Director, Conservation Division, Kansas Corporation Commission. _____ Yes _____ No.

14. A construction plan is submitted with the application and shows or illustrates the information contained in paragraphs #4 through #12.

15. The cathodic protection borehole will be abandoned and plugged if it: (a) is not completed due to unforeseen circumstances, (b) either contaminates or threatens to contaminate a fresh water aquifer, (c) encounters uncontrollable artesian flow, (d) has exhausted its anodes and replacement anodes are not installed within one year, or (e) has not been used for one year and the applicant does not demonstrate intentions to use it.

16. The applicant understands and is aware that the Equus Beds Groundwater Management District No. 2 has adopted a policy that establishes minimum standards to drill, construct and abandon cathodic protection boreholes and agrees to comply with the adopted standard and policy. Further, the applicant may, pursuant to District policy D.S.P. 9007.1 appeal these standards and request a waiver of an adopted standard.

17. Dated at _Mullinville__ , Kansas, this ___2____ day of __April_, 2010____.

_____Hayse Management Services____
(Applicant)

By_____
(Signature)

_____Supervisor_____
(Title)

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12-Dec-00

15-155-21560-0000

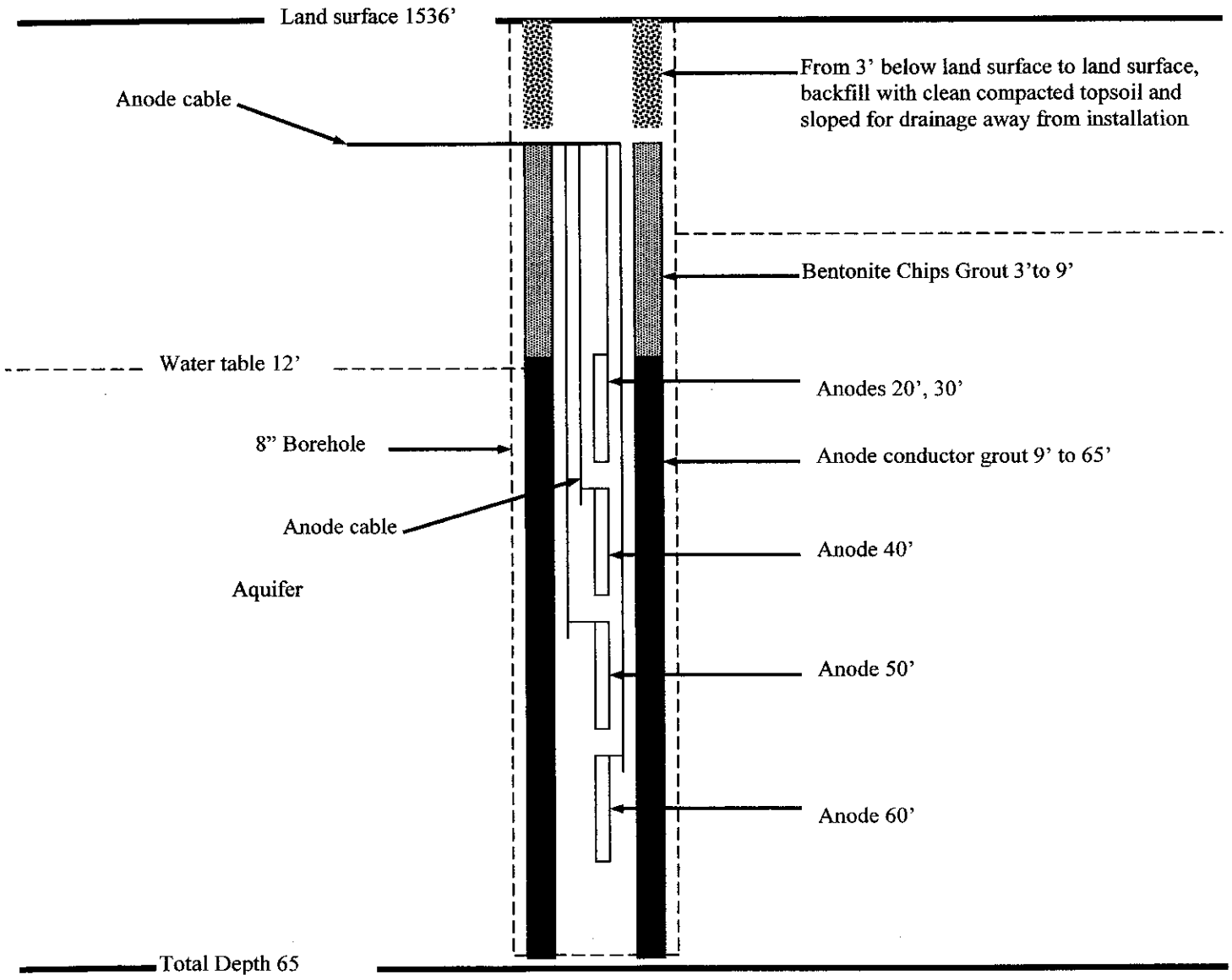
CATHODIC PROTECTION BOREHOLE ILLUSTRATION

Blackhills Corp.

4th & Westland, Hutchinson, Kansas

May, 2010

Uncased Borehole #1 Construction Features



15-155-21560-0000

APPLICANT - DO NOT CONTINUE BELOW DOUBLE LINE

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For Equus Beds Groundwater Management District Use

1) Application received on 4/27/2010.

2) Application review by Tim Boese, GMD2

Manager
(Title)

3) The application is hereby denied. The denial was based on the following findings:

_____

_____

_____

_____

4) The application meets or exceeds the Cathodic Protection Borehole K.A.R. 82-3-700 and K.A.R. 82-3-705 through K.A.R. 82-3-710 and is hereby approved by Board of Directors, Equus Beds Groundwater Management District No. 2 this 16th day of June, 20 10.

Tim Boese

Equus Beds Groundwater Management District No. 2

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form CDP-1
April 2004
Form must be Typed

APPLICATION FOR SURFACE PIT

Submit in Duplicate

Operator Name: BlackHills Corp %Hayse Management Services | License Number:

Operator Address: PO Box 107 Mullinville KS 67109

Contact Person: Dale Hayse | Phone Number: 620-548-2369

Lease Name & Well No.: Cathodic Protection

Pit Location (QQQQ): ___ - NW - NE - NW

Type of Pit:
☐ Emergency Pit ☐ Burn Pit
☐ Settling Pit ☐ Drilling Pit
☐ Workover Pit ☐ Haul-Off Pit
(If WP Supply API No. or Year Drilled)

Pit is:
☒ Proposed ☐ Existing
If Existing, date constructed: ___
Pit capacity: 0 (bbls)

Sec. 15 Twp. 23 R. 6 ☐ East ☒ West
5,230 Feet from ☒ North / ☐ South Line of Section
1,740 Feet from ☐ East / ☒ West Line of Section
Reno County

Is the pit located in a Sensitive Ground Water Area? ☐ Yes ☒ No

Chloride concentration: ___ mg/l
(For Emergency Pits and Settling Pits only)

Is the bottom below ground level? ☐ Yes ☒ No

Artificial Liner? ☐ Yes ☒ No

How is the pit lined if a plastic liner is not used?

Pit dimensions (all but working pits): 0 Length (feet) 0 Width (feet) ☐ N/A: Steel Pits

Depth from ground level to deepest point: 0 (feet) ☑ No Pit

If the pit is lined give a brief description of the liner material, thickness and installation procedure.

Describe procedures for periodic maintenance and determining liner integrity, including any special monitoring.

Distance to nearest water well within one-mile of pit
___ feet Depth of water well ___ feet

Depth to shallowest fresh water ___ feet.
Source of information:
☐ measured ☐ well owner ☐ electric log ☐ KDWR

Emergency, Settling and Burn Pits ONLY:

Producing Formation: ___

Number of producing wells on lease: ___

Barrels of fluid produced daily: ___

Does the slope from the tank battery allow all spilled fluids to flow into the pit? ☐ Yes ☐ No

Drilling, Workover and Haul-Off Pits ONLY:

Type of material utilized in drilling/workover: ___

Number of working pits to be utilized: ___

Abandonment procedure: ___

Drill pits must be closed within 365 days of spud date.

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

April 2, 2010
Date

Signature of Applicant or Agent

KCC OFFICE USE ONLY Steel Pit ☐ RFAC ☐ RFAS ☐

Date Received: ___ Permit Number: ___ Permit Date: ___ Lease Inspection: ☐ Yes ☐ No

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

15-155-21560-0000

EQUUS BEDS GROUNDWATER MANAGEMENT DISTRICT NO. 2

313 SPRUCE STREET • HALSTEAD, KANSAS 67056-1925 • PHONE (316) 835-2224 • FAX (316) 835-2225 • equusbeds@gmd2.org • www.gmd2.org

June 16, 2010

15-155-21560-00-00

Dale Hayse
Hayse Management Services
PO Box 107
Mullinville, Kansas 67109

Re: Application Nos. CPB-65 and CPB-66 – Blackhills Corp. Gas Distribution Main

Dear Mr. Hayse:

The Equus Beds Groundwater Management District No. 2 reviewed the referenced applications, June 16, 2010, using the District's Revised Management Program (effective May 1, 1995) and Rules and Regulations K.A.R. 82-3-700, K.A.R. 82-3-705 through K.A.R. 82-3-710.

During the review, the applicant requested the following modifications be made to each application: 1) paragraph #1 change the legal description to the Northeast quarter of the Northwest quarter of the Northwest quarter of Section 15, Township 23 South, Range 6 West, and the footage measurements for CPB-65 to 5230' N & 4380' W and CPB-66 to 5230' N & 4340' W; 2) paragraph #3 change the surface elevation to 1541 feet above mean sea level; 3) paragraph #9 change to anodes being installed to a total depth of 60 feet below land surface; and 4) paragraph #10 change to anode conductor grout (Aquagard) being installed from 9 feet below land surface to total borehole depth of 65 feet below land surface.

Based on the review, the applications, as modified, complied with the Cathodic Protection Regulations and the Revised Management Program and are hereby **approved** by the Equus Beds Groundwater Management District No. 2.

Please notify the District 72 hours before drilling and constructing the cathodic protection boreholes.

Thank you for your cooperation and assistance in protecting our groundwater resources from contamination.

Sincerely,
EQUUS BEDS GROUNDWATER
MANAGEMENT DISTRICT NO. 2

Tim Boese
Manager

TDB/db

Enclosures

pc: Doug Louis, Kansas Corporation Commission
Mike Dealy, Kansas Geological Survey - Wichita

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