

KCC District 2

CPB #61
KCC API # 15-113-21329-00-00
2-12-08

CB-1
6MO 2 Rev.
99976

EQUUS BEDS GROUNDWATER MANAGEMENT DISTRICT NO. 2

McPherson County
NW-NW-SW
2106 FSL 32-19-3W
SD30 FWL

313 Spruce Street
Halstead, Kansas 67056-1925
(316) 835-2224

**FORM CP-10
APPLICATION FOR PERMIT TO DRILL AND CONSTRUCT
A CASED CATHODIC PROTECTION BOREHOLE**

Permit Application Number CPB- 61

To the Equus Beds Groundwater Management District No. 2:

Comes now the applicant NU STAR ENERGY whose address is:

<u>7340 WEST 21 NORTH</u> (P.O. Box or Street)	<u>WICHITA KS</u> (City) (State)	<u>66205</u> (Zip Code)
<u>316</u> (Area Code)	<u>731-7018</u> (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 McPHERSON state of Kansas, to the extent and in accordance with the following:

- The location of the proposed cathodic protection borehole is in the NW quarter of the NW quarter of the SW quarter of Section 32, Township 19 south, Range 3 (west/east) and more particularly described as being near a point 2106 feet north and 5030 feet west of the apparent southeast corner of said section.
- The proposed use of the cathodic protection borehole is to provide cathodic protection of the applicant's NCRA - Pipeline JD facility from electrochemical corrosion.
- The land surface elevation is 1480 JD feet above mean sea level and the method of measurement used was (a) surveyed, (b) topographic map or (c) other KCC.
- The depth to surface or top of bedrock or shale is 167 feet below land surface (bls).
- The depth to the water table of the fresh water aquifer is 85 feet bls.
- Aquifer salinity as indicated by chloride concentration is 50-100 mg/L and was determined by: (a) published report, (b) test well data, or (c) other J BPU data JD
- The total depth of the cathodic protection borehole is 350 feet bls.
- A non metallic surface casing equipped with centralizers will be installed in the surface casing borehole when drilling has penetrated 200 feet bls, which is a minimum of 20 feet below bedrock or shale surface as listed in paragraph #4.
- Casing centralizers will be installed on the surface casing beginning at the surface casing's total depth and at 40 feet intervals along the complete length of the surface casing at depths of 40, 80, 120, 160, 200, _____, _____, _____ feet bls.
- The diameter of the surface casing borehole will be a minimum of six inches larger than the outside diameter of the surface casing. The diameter of the borehole containing the surface casing will be 17 inches and the outside diameter of the surface casing will be 10 3/4 inches.

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Equus Beds Groundwater
Management District No. 2

- 11. The standard dimension ratio (SDR) of the surface casing calculated by dividing the surface casing's outside diameter (OD) of 10.750 inches by its minimum wall thickness (MWT) of .511 inches equals 21.
- 12. A pitless surface casing adapter will be installed in the surface casing 3 feet bls.
- 13. The annular space between the surface casing and the borehole will be grouted using: (a) cement, neat cement, (c) bentonite clay grout, (d) bentonite cement or (e) other _____ from a total surface casing depth of 200 feet bls to 3 feet bls.
- 14. The top of the surface casing will be fitted with a watertight cap and will: (a) terminate _____ feet above land surface, (b) terminate in a water resistant and structurally sound vault _____ feet bls or be buried 3 feet bls.
- 15. The anodes will be installed beginning at a depth of 253 feet bls to a total depth of 350 feet bls.
- 16. Anode conductor (backfill) material will be installed beginning at a depth of 205 feet bls to a total depth of 350 feet bls. *Loresco sws hole plug*
- 17. An anode vent pipe will be installed and completed 3 feet above land surface.
- 18. A concrete base or pad (will) (will not) be constructed around the above ground surface casing or vault.
- 19. Will the use of a drilling pit threaten to contaminate fresh and usable groundwater? _____ Yes No. If Yes complete sections (a) and (b). Circle one: (a) the pit will be: constructed so that the bottom and sides have a hydraulic conductivity no greater than 1×10^{-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.
- 20. A construction plan is submitted with the application and shows or illustrates the information contained in paragraphs #4 through #18.
- 21. 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.
- 22. The applicant understands and is aware that the Equus Beds Groundwater Management District No. 2 has adopted a regulation that establishes minimum standards to drill, construct and abandon cathodic protection boreholes and agrees to comply with the adopted regulation. Further, the applicant may, pursuant to District policy D.S.P. 9007.1, appeal these regulations and request a waiver of an adopted regulation.
- 23. Dated at HUTCHINSON, Kansas, this 1st day of February, 2008

TERESA DODSON
(Applicant)

By Teresa Dodson
(Signature)

Secretary
(Title)

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**ATTACHMENT TO
APPLICATION FOR PERMIT TO DRILL
AND CONSTRUCT A CASED CATHODIC PROTECTION BOREHOLE
PERMIT APPLICATION NUMBER CPB- 61**

14a) If the surface casing is buried, the inside of the surface casing will be grouted with: (a) cement, (b) neat cement, (c) bentonite clay grout, (d) bentonite cement or (e) _____, from a total depth of 205 feet below land surface to the top of the surface casing and the capped surface casing will be buried with clean compacted topsoil from 3 feet below land surface to land surface.

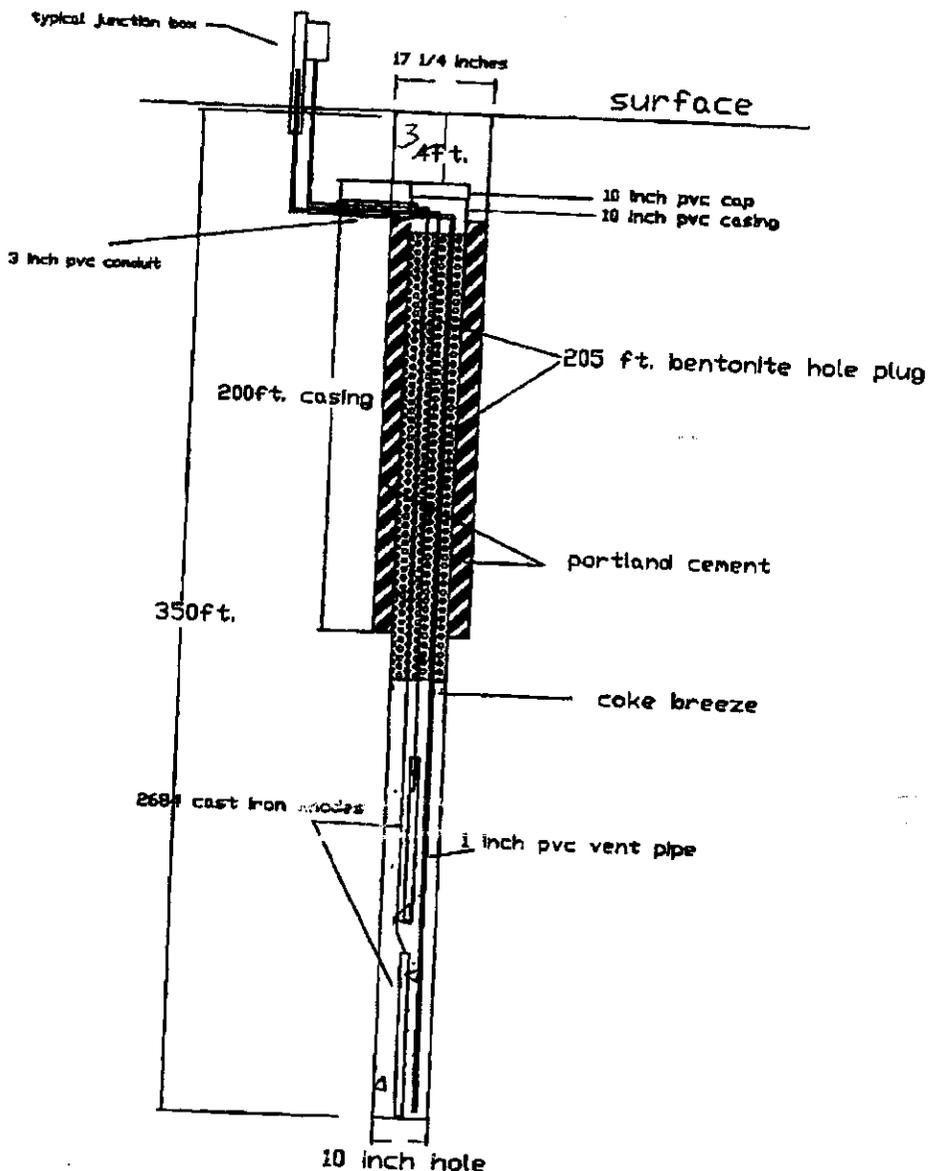
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Equus Beds Groundwater
Management District No. 2

^ATT14A.DOC

15-113-213 29-0000



SEC: ?	TWP: ?	RGE: ?
TRACT: ?		
COUNTY: ?		
STATE: ?		
LAND OWNER: ?		
ELECTRIC CO: ?		

NuStar Energy
Site Location
Mcperson, Ks

LEGEND

⊙ Utility Pole	— CP Cable
□ Rectifier	— Pipeline
⊠ Deep Bed	— X Fence
● Anode	— Electric Property
○ Depleted Anode	▽ ETS

DATE: ?
DRAWN: SLJ
ENGR: ?
SCALE: ?
SHEET 1 OF 1
DRAWING NO: ?

SESCO
 526 S. SEMINOLE
 BARTLESVILLE, O.
 74000

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~~JAN 30 2008~~

Equus Beds Groundwater
 Management District No. 2

APPLICANT DO NOT CONTINUE BELOW DOUBLE LINE

For Equus Beds Groundwater Management District Use

1) Application received on 2/1/08.

*original application received 12-14-07
Replaced with revised application 2-1-08*

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 4th day of February, 20 08.

Tim Boese
Tim Boese, Interim Manager
Equus Beds Groundwater Management District No. 2

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BOB SEILER, PRESIDENT
FRANK HARPER, VICE PRESIDENT
DAVID STROBERG, SECRETARY
LARRY JACOB, TREASURER
TIM BOESE, MANAGER
THOMAS A. ADRIAN, ATTORNEY



15-113-21329-0000

DIRECTORS
DENNIS GRUENBACHER
DON KOCI
KIRK LARSON
FRED SEILER
DAVID WARREN

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

February 6, 2008

Nu Star Energy
7340 West 21st Street North
Wichita, Kansas 66205

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KANSAS CORPORATION COMMISSION

FEB 07 2008

CONSERVATION DIVISION
WICHITA, KS

Re: Application No. CPB 61 – Nu Star Energy

Dear Sir or Madam:

The Equus Beds Groundwater Management District No. 2 reviewed the referenced application, February 4, 2008, 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.

The District received the original application on December 14, 2007. Subsequently, a revised application was submitted to the District on February 1, 2008, which replaced the December 14, 2007, application.

Based on the review, the application, as revised, complied with the Cathodic Protection regulations and the Revised Management Program and is hereby **approved** by the Equus Beds Groundwater Management District No. 2.

Please note that the approved application was provided, in person, to your drilling contractor, Darling Drilling, on February 4, 2008, so that drilling of the cathodic protection borehole could begin that day. Due to inclement weather, it is the District's understanding that drilling operations have temporarily ceased. Please notify the District prior to any further drilling of the borehole.

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

Enclosure
TDB/db

pc: Doug Louis, Kansas Corporation Commission, w/enclosure
Darling Drilling, w/enclosure