ENERGEN
RESOURCES

March 28, 2018

University of Texas System
University Lands
P.O. Box 553
Midland, Texas 79702

RE: Energen Resources Corporation
Application to Dispose Fluid Into a Reservoir Productive of Oil or Gas
University 36-20 Well(s) #2D
Phantom (Wolfcamp) Field, Winker County, District 8

Energen Resources is applying to the Railroad Commission of Texas for authority to dispose fluids into the Delaware Formation.

The Railroad Commission of Texas requires that the attached information (H-1/H-1A both sides) be sent to all offset operators, surface owners and the county clerk.

Sincerely,

Vonda Freeman
432-684-3693
vonda.freeman@energen.com

INSTRUCTIONS FOR FORM H-1

1. **Application**. File the original Form H-1 application, including all attachments, with Assistant Director, Environmental Services, Railroad Commission of Texas, P. O. Box 12967, Capitol Station, Austin, Texas 78711. File one copy of the application and all attachments with the appropriate Railroad Commission District Office. Include with the original application a non-refundable fee of $200, payable to the Railroad Commission of Texas. Submit an additional $150 for each request for an exception to Statewide Rule 46(g)(3) and/or (j)(5)(B).

2. **Well Logs**. Attach the complete electric log or a similar well log for one of the proposed injection wells or for a nearby well. Attach any other logging and testing data, such as a cement bond log, available for the well that supports this application.

3. (a) **For a new project**, attach a map with surveys marked showing the location and depth of all wells of public record within one-quarter (1/4) mile radius of the proposed injection well(s).
(b) **For an amendment to add wells to a previous authority**, attach a map with surveys marked showing the location and depth of all wells of public record within one-quarter (1/4) mile radius of the additional wells, unless such data has been submitted previously for the project.
(c) **Table of Wells**. For those wells in 3(a) or 3(b) that penetrate the top of the injection interval, attach a table of wells showing the dates drilled and their current status. The Commission may adjust or waive this data requirement in accordance with provisions in the "Area of Review" section of Statewide Rule 46 (Rule 46(e)).

4. **Water Letter**. Attach a letter from the Texas Commission on Environmental Quality (TCEQ) or its predecessor or successor agencies for a well within the project area stating the depth to which usable quality water occurs.

5. **Form(s) H-1A**. Attach Form H-1A showing each injection well to be used in the project. Up to TWO wells can be listed on each Form H-1A.

6. **Use of Fresh Water**. Attach Form H-7, Fresh Water Data Form, for a new injection project that includes the use of fresh water. An updated Form H-7 must be attached to Form H-1 for an expansion of a previously authorized fresh water injection project unless the fresh water is purchased from a commercial supplier, public entity, or from another operator.

7. **Plat of Leases, Notice and Hearings**

(a) Plat of Leases. Attach a plat of leases showing producing wells, injection wells, offset wells and identifying ownership of all surrounding leases within one-half (1/2) mile.

(b) Notice.
(1) Send or deliver a copy of the application to the owner of record of the surface tract on which the well(s) is located; each Commission-designated operator of any well located within one-half (1/2) mile of the proposed injection well(s); and the clerk of the city and county in which the well(s) is located. If this is the initial application for fluid injection authority for this reservoir, send copies of the application to all operators in the reservoir. Attach a signed statement indicating the date the copies of the application were mailed or delivered and the names and addresses of the persons to whom copies were sent.

(2) Attach an affidavit of publication signed by the publisher that notice of the application has been published in a newspaper of general circulation in the county where the well(s) will be located. Notice instructions and forms may be obtained from the Commission's Austin Office, the Commission's website (www.rrc.state.tx.us) or the District Offices. Attach a newspaper clipping of the published notice.

(c) Protests and Hearings. An affected person or local government may protest this application. A hearing on the application will be held if a protest is received and the applicant requests a hearing, or if the Commission determines that a hearing is in the public interest. Any such request for a public hearing shall be in writing and contain: (1) the name, mailing address and phone number of the person making the request; and (2) a brief description of how the protestant would be adversely affected by the granting of the application. If the Commission determines that a valid protest has been received, or that a hearing would be in the public interest, a hearing will be held after issuance of proper and timely notice of the hearing by the Commission. If no protest is received within fifteen (15) days of publication or receipt in Austin of the application, the application may be processed administratively.

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

Form H-1
05/2004
DBC 0504

APPLICATION TO INJECT FLUID INTO A RESERVOIR PRODUCTIVE OF OIL OR GAS

1.Operator name **Energe Resources Corporation** (as shown on P-5, Organization Report) 2. Operator P-5 No. **252002**

3.Operator Address **3510 N. "A" St, Bldgs A & B Midland, TX 79705**

4. County **Winkler** 5. RRC District No. **08**

6. Field Name **Phantom (Wolfcamp)** 7. Field No. **71052900**

8. Lease Name **University 36-20** 9. Lease/Gas ID No. **43417**

10. Check the Appropriate Boxes: New Project ☒ Amendment ☐

If amendment, Fluid Injection Project No. F-_____

Reason for Amendment: Add wells ☐ Add or change types of fluids ☐ Change pressure ☐

Change volume ☐ Change interval ☐ Other (explain) _____

RESERVOIR DATA FOR A NEW PROJECT

11. Name of Formation **Delaware Mountain Group** 12. Lithology **Sand** (e.g., dolomite, limestone, sand, etc.)

13. Type of Trap **Stratigraphic** (anticline, fault trap, stratigraphic trap, etc.) 14. Type of Drive during Primary Production **Water**

15. Average Pay Thickness **500** 16. Lse/Unit Acreage **640** 17. Current Bottom Hole Pressure (psig) _____

18. Average Horizontal Permeability (mds) **25** 19. Average Porosity (%) **16**

INJECTION PROJECT DATA

20. No. of Injection Wells in this application **1**

21. Type of Injection Project: Waterflood ☐ Pressure Maintenance ☐ Miscible Displacement ☐ Natural Gas Storage ☐

Steam ☐ Thermal Recovery ☐ Disposal ☒ Other _____

22. If disposal, are fluids from leases other than the lease identified in Item 9? Yes ☐ No ☐

23. Is this application for a Commercial Disposal Well ? Yes ☐ No ☒

24. If for commercial disposal, will non-hazardous oil and gas waste other than produced water be disposed? Yes ☐ No ☐

25. Type(s) of Injection Fluid:

Salt Water ☒ Brackish Water ☐ Fresh Water ☐ CO_2 ☐ N_2 ☐ Air ☐ H_2S ☐ LPG ☐ NORM ☐

Natural Gas ☐ Polymer ☐ Other (explain) _____

26. If water other than produced salt water will be injected, identify the source of each type of injection water by formation, or by aquifer and depths, or by name of surface water source:

CERTIFICATE

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that the data and facts stated therein are true, correct, and complete, to the best of my knowledge.

Vonda Freeman 03/28/2018
Signature Date

Vonda Freeman, vonda.freeman@energen.com
Name of Person (type or print)

Phone **(432)684-3693** Fax _____

For Office Use Only	Register No.	Amount $

See Reverse Side for Required Attachments

RAILROAD COMMISSION OF TEXAS -- OIL AND GAS DIVISION

Form H-1A
DBC 0504

INJECTION WELL DATA (attach to Form H-1)

1. Operator Name (as shown on P-5): **ENERGEN RESOURCES CORPORATION**
2. Operator P-5 No.: **252002**
3. Field Name: **Phantom (Wolcamp)**
4. Field No.: **71052900**
5. Current Lease Name: **University 36-20**
6. Lease/Gas ID No.: **43417**
7. Lease is **13.7** miles in a **NW** direction from **Pyote** (center of nearest town).

8. Well No.	9. API No.	10. UIC No.	11. Total Depth	12. Date Drilled	13. Base of Usable Quality Water (ft)
2D	42-495-34091		8200	/ /2018	250

14. (a) Legal description of well location, including distance and direction from survey lines:
1551 FNWL & 790 FSWL Sec 36 Blk 20, ULS A-U31
(b) Latitude and Longitude of well location, if known (optional) Lat. **31.685174 NAD 27** Long. **-103.272499**

15. New Injection Well ☒ or Injection Well Amendment ☐ Reason for Amendment: Pressure ☐ Volume ☐ Interval ☐ Fluid Type ☐
Other (explain) _____

Casing	Size	Setting Depth	Hole Size	Casing Weight	Cement Class	# Sacks of Cement	Top of Cement	Top Determined by
16. Surface	9 5/8	1353	12 1/4	40	C	590	Surface	Circ.
17. Intermediate								
18. Long string	7	8200	8 3/4	29	C	1095	4415	Calc
19. Liner								

20. Tubing size	21. Tubing depth	22. Injection tubing packer depth	23. Injection interval
4 1/2	5050	5050	5050 to 8000

24. Cement Squeeze Operations (List all)	Squeeze Interval (ft)	No. of Sacks	Top of Cement (ft)

25. Multiple Completion? Yes ☐ No ☒
26. Downhole Water Separation? Yes ☐ No ☒
NOTE: If the answer is "Yes" to Item 25 or 26, provide a Wellbore Sketch

27. Fluid Type	28. Maximum daily injection volume for each fluid type (rate in bpd or mcf/d)	29. Estimated average daily injection volume for each fluid type (rate in bpd or mcf/d)
Salt Water	30000	15000

30. Maximum Surface Injection Pressure: for Liquid **2525** psig for Gas _____ psig.

8. Well No.	9. API No.	10. UIC No.	11. Total Depth	12. Date Drilled	13. Base of Usable Quality Water (ft)

14. (a) Legal description of well location, including distance and direction from survey lines:
(b) Latitude and Longitude of well location, if known (optional) Lat. _____ Long. _____

15. New Injection Well ☐ or Injection Well Amendment ☐ Reason for Amendment: Pressure ☐ Volume ☐ Interval ☐ Fluid Type ☐
Other (explain) _____

Casing	Size	Setting Depth	Hole Size	Casing Weight	Cement Class	# Sacks of Cement	Top of Cement	Top Determined by
16. Surface								
17. Intermediate								
18. Long string								
19. Liner								

20. Tubing size	21. Tubing depth	22. Injection tubing packer depth	23. Injection interval
			_____ to _____

24. Cement Squeeze Operations (List all)	Squeeze Interval (ft)	No. of Sacks	Top of Cement (ft)

25. Multiple Completion? Yes ☐ No ☐
26. Downhole Water Separation? Yes ☐ No ☐
NOTE: If the answer is "Yes" to Item 25 or 26, provide a Wellbore Sketch

27. Fluid Type	28. Maximum daily injection volume for each fluid type (rate in bpd or mcf/d)	29. Estimated average daily injection volume for each fluid type (rate in bpd or mcf/d)

30. Maximum Surface Injection Pressure: for Liquid _____ psig for Gas _____ psig.

FORM H-1A INSTRUCTIONS

05/2004

1. File as an attachment to Form H-1 to provide injection well data for each application for a new injection well permit or to amend an injection well permit.

2. Complete the current field name and number (Items 3 and 4) with the current field designation in Commission records.

3. Complete the current lease name and number (Items 5 and 6) with the current lease identification in Commission records for each well in the application. Use separate H-1A Forms for each lease.

4. Provide the current well number(s) for existing wells in Item 8. Provide the proposed well numbers for wells that have not yet been drilled.

5. Check in Item 15 the appropriate box for a new injection well permit or an amendment to an injection well permit. If an amendment, check the appropriate boxes for the reason(s) for the application(s) for amendment. If "other" is checked, provide a brief explanation.

6. Provide complete well construction information (Items 16 through 26), including all proposed re-completion (e.g. liner, cement squeeze, tubing, packer). Attach additional sheets if necessary. For Item 19, if the liner was not to the surface, indicate both the top and the bottom depth of the liner as the "Setting Depth."