RAILROAD COMMISSION OF TEXAS OIL AND GAS DIVISION

Form H-1

APPLICATION TO INJECT FLUID INTO A RESERVOIR PR	RODUCTIVE OF OIL OR GAS								
1.Operator name Frio Resources, LLC	_ 2. Operator P-5 No. 286622								
(as shown on P-5, Organization Report)	·								
3.Operator Address 950 Echo Lane Suite 355 Houston, TX 77024									
4. County Victoria	5. RRC District No. 02								
6. Field Name Koontz (4750)									
8. Lease Name Keeran -A-									
10. Check the Appropriate Boxes: New Project ☐ Amendment ☑									
If amendment, Fluid Injection Project No. F-12761									
Reason for Amendment: Add wells 🖾 Add or change types	s of fluids Change pressure								
Change volume Change interval Other (explain)									
RESERVOIR DATA FOR A NEW PROJECT									
11. Name of Formation Frio									
13. Type of Trap Simple Anticline (anticline, fault trap, stratigraphic trap, etc.) 14. Type of Drive during Primary Production Water Drive (anticline, fault trap, stratigraphic trap, etc.)									
15. Average Pay Thickness 20 16. Lse/Unit Acreage 881 17. Current Bottom Hole Pressure (psig) 1850									
18. Average Horizontal Permeability (mds) 1500 19. Average Porosity (%) 30									
IN JECTION PRO JECT DATA									
INJECTION PROJECT DATA									
20. No. of Injection Wells in this application1	scible Displacement Natural Gas Storage								
	sposal								
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 \(\Boxed{\square}\) No \(\Boxed{\square}\)									
	nduced water be disposed? Fes 🗀 NO 🗀								
25. Type(s) of Injection Fluid:									
Salt Water 🗵 Brackish Water 🗆 Fresh Water 🗀 CO ₂ 🗆 N ₂ 🗆									
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								

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. Name of Person (type or print)

Phone 713-973-9895

For Office Use Only

aquifer and depths, or by name of surface water source:

Register No.

Amount \$

Fax

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).
- 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.
- (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)).
- 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.
- 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) <u>Plat of Leases</u>. 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) <u>Attach an affidavit of publication</u> 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) <u>Protests and Hearings</u>. 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-1A

INJECTION WELL DATA (attach to Form H-1)										
1 Operator Name (as shown on P-5)				esources, LLC				2. Operator P-5 No. 286622		
3. Field Name Koontz (4750)							4. Field	No. 50207520		
5. Current Lease Name Keeran -A-								Gas ID No. 02249		
7. Lease is 8 miles in a NE direction from Placedo (center of nearest town).										
8. Well No. 9. API No. 10. UIC No. 11. Total Depth 12. Date Drilled 48.72' 05/09/1993								of Usable Quality Water 2,000		
14. (a) Legal description of well location, including distance and direction from survey lines:										
674' from the NW survey line, 13,212' from the NE survey line, Martin De Leon Survey A-74 (b) Latitude and Longitude of well location if known (optional) Lat 28,7925047 Long -96,749627										
(b) Eatitude and Edifficulty of Well location, if known (optional)										
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	Cement	# Sacks of	Top of	Top Determined by		
16. Surface	9-5/8"	560	12-1/4"	Weight 36#	Class Standard	Cement 220	Cement Surface	Circulated		
17. Intermediate	5.41011			470				O'control of		
18. Long string 19. Liner	5-1/2"	4872	8-3/4"	17#	Premium	1020	Surface	Circulated		
20. Tubing size 4"	21. Tubin		22. Injection tubing packer depth 4700'			23. Injection interval 4760' to 4870'				
24. Cement Sque			Squeeze	e Interval (ft)				Top of Cement (ft)		
Squeeze Exi	sting Perfs (has	s not occured yet)		1723 - 4730		50				
Squaszo Existing Forts (read not second you)			4720 - 4700							
25. Multiple Comp	oletion?		26. Downhole Water Separation?		NOTE: If the answer is "Yes" to Item 25					
Yes □ No 区			Yes □ No 🗵			or 26, provide a Wellbore Sketch				
27. Fluid Type			28. Maximum daily injection volume for 29. E			29. Estimated	29. Estimated average daily injection volume for each			
Field Saltwater			each fluid type (rate in bpd or mcf/d) fluid ty			fluid type (rate	type (rate in bpd or mcf/d)			
FIEI		20,000			15,000					
30. Maximum Sur	face Injecti	on Pressure	for Liqui	id 1500	psig	for Gas		psig.		
8. Well No.	9. API No		10. UIC No			12. Date Drilled		of Usable Quality Water		
14. (a) Legal des	cription of v	vell location, include	lina distanc	e and direction	from survey lin	nes:	(ft)			
	•		•		•		1			
		de of well location,					Long.			
15. New Injection Well 🗆 or Injection Well Amendment 🗆 Reason for Amendment: Pressure 🗀 Volume 🗀 Interval 🗀 Fluid Type 🗆								iterval-□ Fluid Type □		
Other (explain)										
Casing	Size	Setting Depth	Hole Siz	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	g depth	22. Injec	tion tubing pack	ker depth	23. Injection	interval	_to		
24. Cement Squeeze Operations (List all)		Squeeze Interval (ft)		No. of Sacks		Top of Cement (ft)				
25. Multiple Completion?						NOTE: If the answer is "Yes" to Item 25				
Yes □ No □		Yes No No			or 26, provide	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)				
			- Caori IIdi	- 13 bo (rate ii) r		type (late				
30. Maximum Sur	face Injecti	on Pressure:	for Liqui	id	psig	for Gas		psig.		

- 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.
- 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."