### **RAILROAD COMMISSION OF TEXAS OIL AND GAS DIVISION**

# Form H-1 05/2004

			RODUCTIVE OF OIL OF						
1.Operator name Legend Energy Te (as shown on P-5, Org	exas, LLC ganization Report)	• •	_ 2. Operator P-5 No	100638					
3.Operator Address 9230 Deer Crossi	ing, Lorton, VA 2	2079							
4. County Victoria			5. RRC District No0	2					
6. Field Name Placedo, East (6000 S	Sd.)		7. Field No71802	684					
8. Lease Name Placedo Ranch			_9. Lease/Gas ID No	09431					
10. Check the Appropriate Boxes: N	New Project 🗵	Amendment							
If amendment, Fluid Injection Pr	roject No. F	· · · · · ·							
Reason for Amendment: Add	wells ' 🗆	Add or change type	s of fluids   Chang	e pressure					
Char			Other (explain)	, "					
		ATA FOR A NEW PR	•						
11. Name of Formation <u>Greta/Cataho</u>			(e.a., dolomit	e, limestone, sand, etc.)					
13. Type of Trap 14. Type of Drive during Primary Production water (anticline, fault trap, stratigraphic trap, etc.)									
15. Average Pay Thickness 950' 16. Lse/Unit Acreage 677.68 17. Current Bottom Hole Pressure (psig) 2100									
18. Average Horizontal Permeability (mds) 400 19. Average Porosity (%) 29									
INJECTION PROJECT DATA									
20. No. of Injection Wells in this application1									
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 ?									
24. If for commercial disposal, will non-haz	zardous oil and gas	waste other than pro	oduced water be dispose	d? Yes □ No □					
25. Type(s) of Injection Fluid:		4							
Salt Water 🖾 Brackish Water 🗆	Fresh Water	CO₂ □ N₂ □	Air ☐ H₂S ☐ L	PG □ NORM □					
Natural Gas □ Polymer ☒	Other (explain)	RCRA Exemp	t Wastes						
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.    CERTIFICATE   Support Control   Signature   Date   Barbara Critchlow   Name of Person (type or print)   Date   Date									
		Phone <u>361-526-</u>		2073 MAY 31 A & 45					
For Office Use Only	Register No.		Amount \$	Dr. Chall					
See Reverse Side for Required Attachments  COUNTY CLERK  VIOLETTA									

#### **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)).
- 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) <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

		II/J	EC HON	WELL DAI	A (attach to	(1)			
1. Operator Name	(as shown	on P-5)		_				or P-5 No. 1638	
Legend Energy Texas, LLC  3. Field Name Placedo, East (6000 Sd.)						4. Field No.			
5. Current Lease 1		00 Sa.)		71802684 6. Lease/Gas ID No.				802684 /Gas ID No.	
Placedo F			<del> </del>			<del></del>		431	
7. Lease is4.6	miles	s in a _SE		direction from	Placedo		(cent	er of nearest town).	
8. Well No.	9. API No. 469-34		10. UIC No		otal Depth 12 3112	2. Date Drilled	13. Base 0 (ft) 1450	of Usable Quality Water	
14. (a) Legal des	cription of w			e and direction			01 (19_110(		
(b) Latitude a	nd Longitud	le of well location,	if known (c	ptional) Lat.	28.676408	NAD83)	Long. <u>-96,7</u>	56201 (NAD83)	
15. New Injection	Well 🗵 or	Injection Well Ar	mendment	☐ Reason f	or Amendment:	Pressure 🗆	Volume 🖳 li	nterval 🗀 Fluid Type 🗆	
				Other (ex	plain)	<del> </del>			
Casing	Size	Setting Depth	Hole Size	Casing Weight	Cement Class	# Sacks of Cement	Top of :: Cement	Top Determined by	
16. Surface	8 5/8	1463	12 1/4	24	Α	600	Surface	circ	
17. Intermediate 18. Long string	4 1/2	6710	7.7/8	11.6	H	690	4576	calc	
19. Liner					and and b				
20. Tubing size 2 3/8	21. Tubing depth 22. Injection tubing packer depth 4200 4200				23. Injection interval 4290 to 5440				
	eeze Operations (List all)			e Interval (ft)		No. of Sacks		Top of Cement (ft)	
			: '						
* .			-						
25. Multiple Completion?			26. Down	26. Downhole Water Separation?			NOTE: If the answer is "Yes" to Item 25		
Yes 🗆 No 🖾				Yes □ No ဩ			or 26, provide a Wellbore Sketch		
27. Fluid Type			28. Maxin	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)		
Saltwater & RCRA Exempt Waste				25000			15000		
		·	· ·	<del></del>			<u>_</u>		
30. Maximum Su 8. Well No.			for Liqu	iid 2145	psig	for Gas 2. Date Drilled		of Unable Quality Water	
							2. Date Drilled 13. Base of Usable Quality Water (ft)		
14. (a) Legal des	scription of	well location, inclu	ding distan	ce and directio	n from survey lin	es:			
(b) Latitude a	and Longitu	de of well location	ı, if known (	optional). Lat	t		Long.		
15. New Injection	ı Well □ o	r Injection Well A	mendment	Reason	for Amendment:	Pressure	Volume □ I	nterval  Fluid Type	
1				Other (e					
Casing	Size	Setting Depth	Hole Si	Casing	Cement	# Sacks of	Top of	Top Determined by	
	0,20	Cotaing Dopair	11010 011	Weight	Class	Cement	Cement	1.00 2.000	
16. Surface 17. Intermediate	1		<del>                                     </del>		<del> </del>		<del> </del>		
18. Long string									
19. Liner	Od Tubin	, double	On Inia	ation tubing no	ekos donth	22 Injection	intoned		
20. Tubing size	21. Tubin	g deptn	22. Inje	22. Injection tubing packer depth			23. Injection intervalto		
24. Cement Squeeze Operations (List all)		Sque	Squeeze Interval (ft)		No. of Sacks		Top of Cement (ft)		
•							-		
25. Multiple Completion?			26. Dov	26. Downhole Water Separation?			NOTE: If the answer is "Yes" to Item 25		
Yes □ No □				Yes □ No □			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)		
						L			
30 Mavimum St	urface Inicol	ion Proceuro:	for Lia	uid	nsin	for Gas	•	nsia.	

- 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."