Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPRO	VED
OMB No. 1004-	013
Evoures: July 31	201

5. Lease Serial No. NMNM-053434

		11 14 .			
Do not use this fo	orm for proposals t	ORTS ON WELLS 27 o drill or to re-enter ar PD) for such proposal	<i>६ሀ </i>	6. If Indian, Allottee or	r Tribe Name
abandoned well. Use Form 3160-3 (AP		instructions on page 2.)	7 If Unit of CA/Agree NM70976B	ment, Name and/or No.
l. Type of Well ☑ Oil Well ☐ Gas W			8. Well Name and No. LEA UNIT #4H	/	
2. Name of Operator LEGACY RESERVES OPERATING LP				9. API Well No. 30-025-02424	
Ba. Address PO BOX 10848 MIDLAND, TX 79702		3b. Phone No. (include area code) 1 432-689-5200		10. Field and Pool or E LEA; BONE SPR	· · /
 Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 1980 FNL & 660 FEL, SEC 14, T20S, R34E PBHL: 1980 FNL & 660 FEL, SEC 14, T20S, R34E 				11. Country or Parish, LEA COUNTY, N	
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDICATE NATUR	E OF NOTIO	CE, REPORT OR OTHE	ER DATA
TYPE OF SUBMISSION	TYPE OF ACTION				
✓ Notice of Intent Acidize Alter Casing		Deepen Fracture Treat	Production (Start/Resume) Reclamation		Water Shut-Off Well Integrity
Subsequent Report	eport Change Plans Plug and Abandon Temporarily Abandon Hor		Other Amendment to Drill Horizontal Lateral -		
Final Abandonment Notice	Convert to Injection	Plug Back		er Disposal	Approved May 31, 2011
the proposal is to deepen directions	ally or recomplete horizontal work will be performed or project operations. If the operations of the operation of the operation of the control of the contro	ly, give subsurface locations and ovide the Bond No. on file with on results in a multiple completi	i measured a BLM/BIA. I on or recom	nd frue vertical depths o Required subsequent rep pletion in a new interval	, a Form 3160-4 must be filed once

---- PLEASE SEE ATTACHED FOR DETAIL ----

Original COA STILL Applies

BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	
D. PATRICK DARDEN, P.E.	itle SENIOR ENGINEER
Signature I. Laton April	pate 06/09/2011
THIS SPACE FOR FEDER	AL OR STATE OFFICE USE
Approved by	
	Title Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or cert that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	d Office
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any pers	on knowingly and willfully to make to any department or agency of the United States any false

Amendments to Original (approved 5/31/11) Form 3160-5 Application to Drill Horizontal Lateral (6/09/11)

LEA UNIT #4H

LEGACY RESERVES OPERATING, L.P. SHL: Unit H, Section 11

T20S-R34E, Lea County New Mexico

Proposed Drilling Plan:

After squeezing off all existing perforations in the Bone Spring zone set a CIBP and whipstock @ ~10,671′ MD. Cut window in 7", 29# csg and drill 5-7/8" or 6" curve section to ~11,075′ MD. Continue drilling 5-7/8" or 6" horizontal lateral to TD @ ~16,096′ MD. Set tapered liner string comprised of 10,500′ new 5-1/2", 17#, Ultra-FJ pipe and new 4-1/2", 13.5#, Ultra-FJ pipe from 10,505′ MD to 16,096′ MD (10,873′ TVD), attempting to cement to surface with DVT set @ ~10,502 in 4-1/2" pipe section. Will perforate and treat well in stages with acid and sand frac as needed. Legacy Reserves Operating, L.P. is requesting a variance on the clearance of the 5-1/2" liner it will be setting from the standard 0.422 inches per side to 0.342 inches per side, as the 7" csg already set in the well prohibits this clearance being obtained. It is necessary to run the 5-1/2" pipe in order to install the proper sized pumping equipment upon completion of the well.

Casing Design:

String	Hole size	Depth	Casing OD	Collar	Weight	<u>Grade</u>
Prod-Liner	7", 26# & 29# csg	0' to 10,500' MD	New 5-1/2"	Ultra-FJ	17#	N-80
Prod-Liner XO	7", 26# & 29# csg	10,500' to 10,502' MD	New 5-1/2" x 4-1/2"	Ultra-FJ	NA	NA
Prod-Liner DVT	7", 26# & 29# csg	10,502' to 10,505' MD	New 4-1/2"	NA	NA	NA
Prod-Liner	7", 26# & 29# csg	10,505' to 10,670' MD	New 4-1/2"	Ultra-FJ	13.5#	P-110
Prod-Liner	5-7/8" or 6" OH	10,670' to 16,096' MD	New 4-1/2"	Ultra-FJ	13.5#	P-110

Cementing Design:

Prod-Liner 1^{st} Stage: 500 sxs (50:50) poz (fly ash) – Class H cmt + 0.1% CD-32 + 0.3%

R-3 + 2% Bentonite + 0.5% FL-52A + 56.5% FW (14.20 ppg, 1.26 cf/sx,

5.69 gps wtr).

2nd Stage Lead: 220 sxs (50:50) poz (fly ash) – Class H cmt + 10% Bentonite + 130.4% FW

(11.80 ppg, 2.29 cf/sx, 13.14 gps wtr).

2nd Stage Tail: 100 sxs – Class H cmt + 0.1% R-3 + 46.4% FW (15.60 ppg, 1.18 cf/sx, 5.23

gps wtr).

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TLEGACY R E S E R V E S

LEA UNIT #4H

LOCATION: See Below for SHL & PBHL.

Proposed Wellbore Configuration

FIELD: Lea (Bone Spring)

COUNTY: Lea

STATE: New Mexico

GL: 3655'

KB: 3677'

SPUD DATE: 12/06/60

LATEST UPDATE: 06/09/2011

BY: DP Darden

API No: 30-025-02424

