Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No. NMNM~~62602~~ 84652 ~~82102~~
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
8. Well Name and No. HAMON FEDERAL COM 1
9. API Well No. 30-025-30848
10. Field and Pool, or Exploratory QUAIL RIDGE; ATOKA
11. County or Parish, and State LEA COUNTY, NM

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator LEGACY RESERVES OPERATING LP
Contact: STEVE OWEN
E-Mail: sowen@legacylp.com

3a. Address
PO BOX 10848
MIDLAND, TX 79702

3b. Phone No. (include area code)
Ph: 432-689-5200

HOBBS OCD

NOV 02 2015

RECEIVED

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 7 T20S R34E NWNE 660FNL 1980FEL

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☒ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

PROPOSE TO CONVERT TO AN SWD FOR THE HAMON FEDERAL A COM LEASE BEGINNING OCTOBER 1, 2015 AND ENDING OCTOBER 10, 2015.
PROCEDURE: SET CIBP @ 12,430'. PERFORATE @ 8,530' AND SQZ W/600 SX CEMENT. PERFORATE 8,140-8,317 W/144 HOLES. ACIDIZE NEW PERFS W/10,000 GAL HCL. RUN INJECTION STRING & PACKER SET @ 8,100'. RUN INJECTIVITY PROFILE & MIT. PUT WELL ON DISPOSAL.

SUBJECT TO LIKE APPROVAL BY STATE

SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #313547 verified by the BLM Well Information System
For LEGACY RESERVES OPERATING LP, sent to the Hobbs
Committed to AFMSS for processing by LINDA JIMENEZ on 08/26/2015 ()

Name *(Printed/Typed)* STEVE OWEN — Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) — Date 08/21/2015

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Paul R Swartz — Title PET — Date 10/28/2015

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office C. FO

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

NOV 04 2015

There are 13 federal mineral, and five fee surface wellbores within a half mile of the Proposed Water Disposal Well. The source of the disposal water will be producing wells. The proposed well may be made to be structurally sound for conversion purposes. A review of wellbores whihin a half mile of the injection zone may be isolated. See well summary spread sheet below. Potential horizontal lateral well completion conflicts have been indicated and the near wellbore distance computed. At this time BLM has no substancial issues/objections for this well's use as a produced water disposal well.

Operator: Legacy Reserves Operating, LP
Well: HAMON FEDERAL COM-1
300 . . . API: 2530848
Legal Surface Loc: T20S-R34E,07.660n1980e
@ Measured T.D.: T20S-R34E,07.660n1980e
Surface Lease: NM82107
Estate - Sfc/Mnrls/Lse: F\F\F
Com Agreement No.:
Unit Agreement No:
WDW Right of Way No.:

BLM Review Date: 10/27/2015
NMOCD Form C-108 Date: 2/3/2014
Administrative Order(s) - Date: SWD-1468, 03/20/2014
Formation, Depth, Pressure: Brushy Canyon, 8060-370, 1612psig

Generic Frac Gradient: 0.2 x top injection depth = initial regulated production water disposal pressure.
An approved Step Rate Test may allow a change to the wellhead injection psig (kept below fracture psig).

Well #	Short API#	Estate Sfc/Mnrls/Lse	SPUD Date	7,860 VTD	Prod Csg Cmt Top ±TOC(ft) or unknown	Date Plugged	± Direction from WDW Wellhead	± Dist from WDW Wellhead	VWDW to Lateral(s) ±Horz Dist to Lateral	top P Wtr Inj ±slope Dist	btm P Wtr Inj ±slope Dist	Evaluate disposal formation isolation from existing and potential productive formations. Confirm casing cement tops of existing wells that penetrate the proposed disposal interval are a minimum of 200ft above that interval. Consider and insure adequate isolation of vertical and calculated short distances from the proposed disposal entry to wells whose surface/bottom hole location is within the one half mile buffer.
1	2530848	F\F\F	4/28/90	13700			0	0	0	0	0	
004H	2541617	P\F\F	10/5/14	10913	0		N4ºE-	1082	75	2854	**2544**	Received 5 1/2" morning report from operator claiming cmt circulated, No CBL
003H	2541305	P\F\F	8/24/13	10902	0		N2ºW-	1134	198	2849	**2540**	Received 5 1/2" morning report from operator claiming cmt circulated, No CBL
1	2531714	F\F\F	11/13/92	13700		12/01/93	N27ºW-	2961				
1	2530881	F\F\F	5/29/90	4189		08/01/07	S-	2990				
1	2532821	F\F\F	5/22/95	3966		10/21/03	S65ºE-	3014				
1	2531056	F\F\F	12/22/90	13660		10/03/97	N46ºE-	3769				Produced from Brushy Cyn 8030-34
2	2536003	P\F\F	9/24/02	13700		02/24/10	N-	3980				
1	2502419	F\F\F	10/19/34	3909			S57ºE-	4770				No P&A record found
001H	2541616	P\F\F	11/28/14	9439			S26ºW-	5363	1418	1978	**1776**	
002H	2541630	P\F\F	8/9/14	10899			S27ºW-	5407	2810	3995	**3781**	
1	2530688	F\F\F	11/18/89	13645		01/29/09	N15ºW-	5467				
1	2502418	F\F\F	3/23/59	3580			N27ºW-	5921				No P&A record found
1	2539120	F\F\F	1/28/09	13750			N27ºE-	5921				
#N/A	2531015	#N/A	#N/A	#N/A		#N/A	#N/A	#N/A				APD cancilled
#N/A	2531386	#N/A	#N/A	#N/A		#N/A	#N/A	#N/A				APD cancilled
				0								

Conditions of Approval

Legacy Reserves Operating, L. P.
Hamon - 01, API 2530848
T20S-R34E, Sec 07, 660FNL & 1980FEL
October 26, 2015

1. Prior to abandoning the producing formation and recompletion to disposal, submit for this well a Lease Operating Statement (L.O.S.) for the last 12 consecutive producing months showing all production, revenue, taxes, and royalties paid, include all types of operating and maintenance expense. This should initially at be a gross level, then boiled down with net numbers showing monthly (PROFIT/LOSS).
2. You are required to perform a reservoir study to determine the remaining reserves to the economic limit for the Atoka formation. The report from this study will include economics based on a Lease Operating/Expense statement, which shall be included with the report. The report shall also include a decline curve based on the recent production. Offer an explanation for the considerable reduction of reported production comparing 12/2014 & 01/2015 with 02/15-08/2015 and the reason the earlier production rates have not been sustained. Also be aware the proposed disposal formation will need to be proven to be noncommercial as a hydrocarbon producer.
3. Subject to like approval by the New Mexico Oil Conservation Division.
4. Notify BLM 575-393-3612 Lea Co. as work begins. Some procedures are to be witnessed. If there is no response, leave a message stating the well's API#, the workover purpose, and a call back phone number. Note the contact, time, & date in your subsequent report.
5. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
6. Surface disturbance beyond the existing pad shall have prior approval.
7. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
8. Functional H_2S monitoring equipment shall be on location.
9. 50000psig (5M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Blind ram(s) and pipe ram(s) designed to close on all workstring diameters used is required equipment. A manual BOP closure system (hand wheels) shall be available for use regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.
10. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding

area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

11. **The BLM PET witness is to run tbg tally and agree to cement volumes and placement. Sample each plug for cement curing time and tag and/or pressure test as requested by BLM PET witness.**
12. **The wellbore is out of compliance with formation plugback requirements. Set a CIBP within 100' of the top Morrow perforation (13,222) and set a minimum 25sx Class "H" balanced cement plug on that CIBP. Tag the plug with tubing at 13140 or higher.**
13. **Set the CIBP of the Legacy procedure within 100' of the top producing perforation of 12524 and place a minimum 25sx Class "H" balanced cement plug on that CIBP.**
14. **Perforate at least 50' below the Wolfcamp formation top of 10900 and squeeze cmt, displacing a volume of "H" cement sufficient to fill the drilled wellbore to 10850 or higher. WOC and tag the plug with tubing.**
15. **The well is in the R-111-P Secretary Potash area which requires at a minimum three casing strings with cement circulated to surface. Only the surface and intermediate casings meet this requirement. The production casing cement shows to be out of compliance at this time and the condition is to be corrected.**
16. **Submit via email or sundry Legacy's procedure to verify or establish the 5 ½" production casing having cement to surface.**
17. **This procedure is subject to the next three numbered paragraphs.**
18. Mix cement plugs to cover a minimum of 100ft plus 10ft for every 1,000ft to the bottom of the plug, rounding the number of necessary sacks up to the nearest 5 sacks. Never use less than 25sx. Examples: A cement plug set at 8000 in 7" casing would require a min of 35sx. A 25sx plug in 5 ½" casing should cover 250ft, which may exceed 100ft plus 10ft per 1000ft.
19. Class H > 7500ft & C < 7500ft) cement plugs(s) will be necessary. For any plug that requires a tag or pressure test a minimum WOC time of 4 hours(C) & 8 hours(H) is recommended. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 ft^3/sx, 6.3gal/sx water and "H" to be mixed 16.4#/gal, 1.06ft^3/sx, 4.3gal/sx water.
20. Minimum requirement for mud placed between plugs is 25 sacks of salt water gel per 100 barrels in 9 lb/gal brine.
21. **Set a minimum 25sx Class "H" balanced cement plug across the Bone Spring formation top from 10950 or below.** WOC & tag the plug at 10800 or above with tubing.
22. **Set a minimum 25sx Class "H" balanced cement plug across the 9599' DV Tool from 9549 or below.** WOC & tag the plug at 9499' or above with tubing.
23. **Set a minimum 25sx Class "H" balanced cement disposal isolation plug from the 8670' or below.** WOC & tag the plug at 8570' or above with tubing.
24. After cementing operations are complete, **perform a charted casing integrity test** of 1622psig minimum. Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range. **Verify all annular casing vents are plumbed to the surface and open during this pressure test.**

Well with a Packer - Operations

1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established.
2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with a minimum 200 psig differential between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). Verify all annular casing vents are plumbed to surface and those valves open to the surface during this pressure test. An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
3) Document the pressure test on a one hour full rotation chart recorder (calibrated within the last 6 months) registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
4) Make arrangements 24 hours before the test for BLM to witness. In Eddy County email Paul R. Swartz pswartz@blm.gov or phone 575-200-7902, if there is no response, 575-361-2822. In Lea County phone 575-393-3612. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number
5) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry.
6) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
7) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
   a) Approved injection pressure compliance is required.
   b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
   c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
8) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
9) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of a full annular fluid level at any time.
10) **Maintain the annulus full of packer fluid at atmospheric pressure. Installation of equipment that will display continuous open to the air packer fluid level above the casing vent is required for this disposal well.**

Call BLM 575-200-7902 and arrange for a BLM witness of that pressure test. Submit a subsequent Sundry Form 3160-5 relating the dated daily wellbore and CIT activities, include a copy of the chart.

25. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from PBTD taken with 0psig casing pressure. The CBL may be attached to a pswartz@blm.gov email.**
26. Class II (production water injection) wells will not be permitted stimulation injection pressures that exceed frac pressure. **Do not exceed the approved SWD-1468 injection pressure of 1612 with stimulation pump pressure.** The subsequent report is to adequately describe the method used to limit stimulation injection pressures. Report maximum and minimum injection rate (BPM) and maximum and minimum stimulation injection pressures (psig).
27. **The operator shall test for oil and gas production from the proposed 8140-311 perforated injection zone. Demonstrate that paying quantities of hydrocarbons are not produced when the well has a pumped off fluid level. After stimulation load volumes have been recovered, this will require a minimum of 1000 barrels to be swabbed from the proposed disposal formation. Open hole logs may support the evaluation.** Provide BLM a copy of a mudlog over the permitted disposal interval and estimated insitu water salinity based on the open-hole logs. **BLM agreement is to be obtained prior completion as a disposal well.**
28. Submit a (BLM Form 3160-**5** subsequent report (daily reports) via BLM's Well Information System; https://www.blm.gov/wispermits/wis/SP (email pswartz@blm.gov for instructions) describing all wellbore activity and the Casing Integrity Test. Include the date(s) of the well **work, and the setting depths of installed equipment: internally corrosive protected tubing,** tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer. The setting depths and descriptions of each are to be included in the subsequent sundry. File intermediate Form 3160-**5** within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
29. Submit the BLM Form 3160-**4 Recompletion Report** within 30 days of the date all BLM approved procedures are complete.
30. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.
31. Enclose a site security diagram for the water disposal facility upstream of this well. Document the lease name and the lease number of the source(s) of production water disposed to that facility with the diagram.
32. Approval is granted for disposal of water produced from the lease, communitization, or unit agreement of this well only. Disposal fluid from another operator, lease, communitization, or unit agreement require BLM surface right-of-way agreement **approvals** and if applicable, authorization from the surface owner.

11) **Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902) before injection begins to arrange for approval of the annular monitoring system.**
12) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
13) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
14) Gain of annular fluid pressure requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0psia. Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
15) Submit a (BLM Form 3160-**5** subsequent report (daily reports) via BLM's Well Information System; https://www.blm.gov/wispermits/wis/SP (email pswartz@blm.gov for operator setup instructions) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of installed equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer. The setting depths and descriptions of each are to be included in the subsequent sundry.
16) A request for increased wellhead pressures is to be accompanied by a step rate test. PRIOR to a Step Rate Test BLM – CFO is requiring a Notice of Intent.
17) Class II (production water injection) wells will not be permitted stimulation injection pressures that exceed frac pressure.

Access information for **use of Form 3160-5** "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.