Form 3160-5 (August 2007)

DEPARTMENT OF THE INTERIOR CD-HOBBS OCD BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

5. Lease Serial No. NM 63763

Do not use this f	OTICES AND REPOR [*] orm for proposals to c Jse Form 3160-3 (APE	irill or to re-en	ter an pd\$50EIVED	6. If Indian, Allottee of	r Tribe Name
SUBMIT IN TRIPLICATE – Other instructions on page 2.				7. If Unit of CA/Agreement, Name and/or No. SAPPHIRE FEDERAL UNIT	
1. Type of Well		>			RAL UNIT
Oil Well Gas Well Other SWD				8. Well Name and No. SAPPHIRE FEDERAL UNIT #1	
2 Name of Operator LEGACY RES	SERVES OPERATING LP	-/		9. API Well No. 30-025-31491	
3a. Address P.O BOX 10848 MIDLAND, TX 79702	[3b.	Phone No. (include 432-689-5200	area code)	10. Field and Pool or E SWD; QUEEN	Exploratory Area
4. Location of Well (Footage, Sec., T., I		11. Country or Parish, State			
1600' FSL & 1750' FEL, UNIT LETTER J,	SEC 23, T19S, R33E			LEA COUNTY, N	IM /
12. CHEC	K THE APPROPRIATE BOX(I	ES) TO INDICATE 1	NATURE OF NOTIC	E, REPORT OR OTH	ER DATA
TYPE OF SUBMISSION			TYPE OF ACT	ION	
Notice of Intent		Deepen Fracture Treat New Construc Plug and Abar	Recla	uction (Start/Resume) umation mplete porarily Abandon	Water Shut-Off Well Integrity Other PULL INJECTION PACKER & REPLACE
Final Abandonment Notice	Convert to Injection	Plug Back	☐ Wate	r Disposal	
WILL UNSET PKR, PO		EW ARROWSET A		IG TBG IN HOLE.	
SEE ATTACHED F CONDITIONS OF A	FOR APPROVAL	MAR	OVED 7 2012 ID MANAGEMENT FIELD OFFICE	accept w/atte 03/07/2	for record hed COA 2012 PRL
14. I hereby certify that the foregoing is to	ue and correct. Name (Printed/T)	pped)			
BERRY JOHNSON		Title (OPERATIONS SUF	PERINTENDENT	
Signature Am	Mm	Date	02/29/2012		-
	THIS SPACE FO	R FEDERAL (OR STATE OF	FICE USE	
Approved by		Ī			
		Tr.	tle		Date
Conditions of approval, if any, are attached that the applicant holds by to equitable the applicant to condicate peratrols	itle to those rights in the subject le	warrant or certify	ffice		
Title 18 II S C Section 1001 and Title 43	IISC Section 1212 make u a cri	me for any person kno	wingly and willfully	o make to any denortmen	at or agency of the United States any folia

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Conditions of Approval

Legacy Reserves Operating LP Sapphire Federal Unit - 01 API 3002531491

March 07, 2012

- 1. Surface disturbance beyond the existing pad must have prior approval.
- 2. Casing added or replaced requires a prior notice of intent (BLM Form 3160-5) approval of the design.
- 3. Closed loop system required. 2000 2M BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 (attachment 1, 2M diagrams of choke manifold equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
- 4. Workover approval is good for 90 days (completion to be within 90 days of approval).
- 5. After injection rates and pressures are stabilized (within six months) an injection profile tracer survey is to be run. Submit the survey report to this office in a subsequent sundry Form 3160-5.

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. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
 - a) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials 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). 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.
 - b) Document the pressure test on a calibrated recorder chart 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.
 - c) At least 24 hours before the test: In Eddy County email Paul R. Swartz <u>pswartz@blm.gov</u>, (phone 575-200-7902). If there is no response phone 575-361-2822. In Lea County email Andy Cortez <u>acortez@blm.gov</u>, (phone 575-393-3612 or 575-631-5801). Note the contact notification method, time, & date in your subsequent report.
 - d) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
 - e) Use of tubing internal protection, 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 is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
 - f) Submit the original subsequent sundry with three copies to BLM Carlsbad.

- 2) 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.
 - i) Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 3) Other unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 4) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity.
- 5) The annulus is to be maintained full of packer fluid at atmospheric pressure. Installation of equipment that will display on site, continuous open to the air fluid level is required. A BLM inspector may request verification of this fluid level at any time.
- 6) **Submit a subsequent report (Sundry Form 3160-5)** describing the installation of packer fluid level monitoring equipment within 30 days of beginning injection.
- 7) The operator shall keep monthly records documenting that the casing annulus is fluid filled. A suggested format for these records is available from the BLM Carlsbad Field Office. Copies of those records shall be furnished at the request of a BLM authorized officer.
- 8) Loss of packer fluid above five barrels per month requires notification of the BLM authorized officer within 5 days.
- 9) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of Opsia. Notify the BLM's authorized officer ("Paul R. Swartz" < pswartz@blm.gov> phone 575-200-7902). If there is no response phone 575-361-2822.
- 10) Also submit to this office a (Sundry Form 3160-5) Notice of Intent (NOI) for planned well work involving a formation change, casing repair/replacement, and injection well fracture treatment for approval by BLM and NMOCD. Verbal approval for the plan may be given by a BLM authorized officer, with the NOI filed within five business days. Packer and tubing repair (normal maintance procedures) do not require a NOI, but a subsequent sundry needs to be filed. http://www.blm.gov/nm/st/en/prog/energy/oil and gas.html (see CFR § 3162.3-2 43 & CFR § 3160.0-9 (c)(1)).
 - a) Submit a (Sundry Form 3160-5) subsequent report (daily reports) 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 required 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 is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.

PRS 03/07/2012

Use of Form 3160-5 "Sundry Notices and Reports on Wells"

§ 43 CFR 3162.3-2 Subsequent Well Operations.

- a) A proposal for further well operations shall be submitted by the operator on Form 3160–5 for approval by the authorized officer prior to commencing operations to redrill, deepen, perform casing repairs, plug-back, alter casing, perform nonroutine fracturing jobs, recomplete in a different interval, perform water shut off, commingling production between intervals and/or conversion to injection. If there is additional surface disturbance, the proposal shall include a surface use plan of operations. A subsequent report on these operations also will be filed on Form 3160–5. The authorized officer may prescribe that each proposal contain all or a portion of the information set forth in §3162.3–1 of this title.
- (b) Unless additional surface disturbance is involved and if the operations conform to the standard of prudent operating practice, prior approval is not required for routine fracturing or acidizing jobs, or recompletion in the same interval; however, a subsequent report on these operations must be filed on Form 3160–5.
- (c) No prior approval or a subsequent report is required for well cleanout work, routine well maintenance, or bottom hole pressure surveys.

[47 FR 47765, Oct. 27, 1982. Redesigned and amended at 48 FR 36583–36586, Aug. 12, 1983, further amended at 52 FR 5391, Feb. 20, 1987; 53 FR 17363, May 16, 1988; 53 FR 22847, June 17, 1988]

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

(c)(1) The information collection requirements contained in part 3160 have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned the following Clearance Numbers:

Operating Forms

Form No.	Name and filing date	
3160-3	Application for Permit to Drill, Deepen, or Plug Back—Filed 30 days prior to planned action	1004–0136
3160–4	With Completion of Recompletion Report and Log—Due 30 days after well completion	1004–0137
3160–5	Sundry Notice and Reports on Wells—Subsequent report due 30 days after operations completed	1004-0135

The information will be used to manage Federal and Indian oil and gas leases. It will be used to allow evaluation of the technical, safety, and environmental factors involved with drilling and producing oil and gas on Federal and Indian oil and gas leases. Response is mandatory only if the operator elects to initiate drilling, completion, or subsequent operations on an oil and gas well, in accordance with 30 U.S.C. 181 et seq.

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

Not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160–5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed.