Form 3160-5 (August 2007)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED

OMB NO	1004-0135
Expires: Jul	ly 31, 2010
Lease Serial No	

CHMIDDY	NOTICES	AND DE	CDODTO	ONIMEL	
SUNDRI	NOTICES	AND KI	EPURIS	ON WEL	LO

Do not use this form for proposals to drill or to re-enter an

NMLC029435B

abandoned well. Use form 3160-3 (APD) for such proposals.					o. If Indian, Anottee of Tribe Name		
SUBMIT IN TRIPLICATE - Other instructions on reverse side.					7. If Unit or CA/Agreement, Name and/or No.		
Type of Well     ☐ Gas Well					8. Well Name and No J L KEEL B 30		
2. Name of Operator Contact TERRY B CALLAHA LINN OPERATING INCORPORATED E-Mail: tcallahan@linnenergy.com			LLAHAN		9 API Well No. 30-015-21460-00-S1		
3a. Address       3b Phone No         600 TRAVIS STREET SUITE 5100       Ph: 281-84         HOUSTON, TX 77002			(include area code) )-4272	)	10. Field and Pool, or Exploratory GRAYBURG		
4 Location of Well (Footage, Sec., T., R., M., or Survey Description)					11. County or Parish, and State		
Sec 6 T17S R31E SWSE 430FSL 2250FEL					EDDY COUNTY, NM		
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE	NATURE OF N	NOTICE, RE	EPORT, OR OTHER	DATA	
TYPE OF SUBMISSION			TYPE OF	ACTION			
□ Notice of Intent ☑ Subsequent Report □ Final Abandonment Notice  13 Describe Proposed or Completed Operation	Subsequent Report			Reclama Recomp Tempora Water D	omplete Other  porarily Abandon  er Disposal		
Attach the Bond under which the wo following completion of the involved testing has been completed. Final Aldetermined that the site is ready for f.  This is Amendment for 3160-5.  Work Completed to Return W.  7/11/2011 - NDWH, NUBOP, 60 jts W/S. SWI.  7/12/2011 - Bleed down well. Top perf @ 2813'. Circulate he FLoat shoe, Float Collar, Starten C. C. S. C. S	l operations. If the operation resupandonment Notices shall be filed final inspection.  5 which was submitted 9-12 ell to Injection:  RU Floor & tongs, TOOH \ PU 27 jts total of 87 tag celole clean. TOOH W/87 jts. t PU 4" L-80 Ultra FLush jt,	ults in a multiple of only after all re 2-2011  W/82 jts 2 3/8  ment @ 2738 Change pipe PU 82 its ta	completion or recognizements, included a second and a second a sec	e was set @ Casing cree	new interval, a Form 3160- n, have been completed, ar	4 shall be filed once	
up SWI, RD Casing crew. BOP was leaking had to call crew back SEE ATTACHED FOR CONDITIONS OF APPROVAL						MNO	
14 Thereby certify that the foregoing is	true and correct. Electronic Submission #11 For LINN OPERATII nmitted to AFMSS for proces	7366 verified NG INCORPO	by the BLM Wel RATED, sent to	I Information	System		
Name(Printed/Typed) TERRY B CALLAHAN			Title REGULATORY SPECIALIST III				
Signature (Electronic Submission) Date C				OTTICE US	 SE		
ACCEPT		I		WHITLOCK	· <del>-</del>	<del></del>	
Approved By ACCEP		]			NGINEERING TECH	Date 09/19/2011	
Conditions of approval, if any, are attache certify that the applicant holds legal or equivalent would entitle the applicant to conductive the applicant to conduct the applicant	Office Carlsbad						
Title 18 U S C Section 1001 and Title 43 States any false, fictitious or fraudulent	U S C. Section 1212, make it a c statements or representations as to	o any matter wit	son knowingly and hin its jurisdiction.	l willfully to ma	ake to any department or a	gency of the United	

### Additional data for EC transaction #117366 that would not fit on the form

#### 32. Additional remarks, continued

7/13/2011 - Test lines to 4000 psi, good. Pumped 2 Bbls H2O broke circulation went to SAPP Chemical wash 10 Bbls, Mix 200 sxs Class C neat 14.8 slurry, 1.32 yield pumped total of 47 Bbls 100% Excess. Dropped 3.47 wiper plug pumped 12 Bbls H2O saw chemical wash come back then lost circulation. Pumped total of 32.5 Bbls of H2O bumped plug @ 1510 psi. The last 1/2 Bbl got circulation back had cement colored water no actual cement. Final Pump pressure was 1010 psi. RD cementer and release. NDBOP set 4" csg slips cut off casing install new WH NUBOP. SWI

7/14/2011 - RU W/L PU CBL RIH Tag @ 2542' should have been 2730' Logged well to surface we had cement @ 70' RD W/L. I called Randy with OCD and he said it was okay to drill out plug. That we needed be sure and file sundry notice. PU 3 1/4 bit TIH W/84 jts @ 2635' SWI.

7/15/2011 - PU power swivel & jts 84 tagged @ 2618' Break circulation start drilling, drilled jt 84,85,86,87, tagged float collar on jt 88. Dilled out float and shoe collar. Drill 16' cement off of composit plug start drilling plug. Fell through circulate clean LD swivel Pull 4 jts to get above perfs SWI.

7/18/2011 - Crew to loc. Well had 650 psi on it. Bled well to frac tank. Rig up reverse unit, had to circ. gas out of the well. started running pipe. tagged up on composite plug, finished pushing what was left of it to bottom (3490') Circ. hole clean, POOH W/ tbg Laying down the work string. Laid down a total of 112 jnts. s/i well, SDFN.

7/19/2011 - 7/21/2011 - Crew standing by waiting on pkr.

7/21/2011 - Packer arrived, but had to have swedge made for bottom of packer to be able to run tail pipe.

7/22/2011 - Pick up 2 jnts ASI-X 4"" packer, 82 jnts 2 - 12' subs. Set pkr @ 2734.86 end of liner @ 2739'. Circ. pkr fluid. ND BOP, set pkr, Flange up well head. Hook up pump trk run 30 min. chart. pkr held.
RDMO well.

7/25/2011 Complete liner installation

8/2/2011 Passed MIT witnessed by Richard Inge.

8/8/2011 RTI w/ choke set at 150 BPD rate & injection pressure of 1300 psi.

## **Conditions of Approval: Wells with Packers\***

# J.L. Keel B 030 API 3001521460

September 15, 2011 -

- 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. Notify Paul R. Swartz at 575-234-5985 and/or 575-200-7902 at least 24 hours before the test. If there is no response, notify the BLM on call drilling phone, 575-361-2822. In Lea County call 575-393-3612.
  - 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, on/off tubing equipment just above the packer, and a profile nipple installation 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 work.
  - 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.
  - e. Other unexplained significant variations of rate or pressure to be reported within 5 days of notice.

- 3. The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity.
  - a. 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.
  - b. **Submit a subsequent report (Sundry Form 3160-5)** describing the installation of packer fluid level monitoring equipment within 30 days of this approval.
  - 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.
  - d. Loss of packer fluid above five barrels per month requires notification of the BLM authorized officer within 5 days.
  - a. 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 at 575-200-7902). If there is no response, notify the BLM on call drilling phone, 575-361-2822. In Lea County call 575-393-3612.
  - e. Also submit to this office a (Sundry Form 3160-5) Notice of Intent (NOI) for approval by BLM and NMOCD with a detailed plan for correction and the anticipated date of correction. Verbal approval for the plan may be given by a BLM authorized officer, with the NOI filed within five business days.
  - f. After the repairs submit a (Sundry Form 3160-5) Subsequent report, describing the repair(s) and Mechanical Integrity Test as per item 1 above.

\*COA's prepared by Paul R. Swartz