Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Artesia

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

Expires July 31, 201 Lease Serial No. NMLC029435A

SUNDRY NO	TICES AND REPORTS ON WELLS
Do not use this for	orm for proposals to drill or to re-enter an
	Hee form 3160-3 (APD) for such proposals

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.					7. If Unit or CA/Agreement, Name and/or No.		
1. Type of Well	<u>-</u>		8. Well Name and No. J L KEEL A 17				
Oil Well Gas Well Other INJECTION					į		
2 Name of Operator Contact TERRY B C LINN OPERATING INCORPORATED E-Mail: tcallahan@linnenergy.c			m		9. API Well No 30-015-25938-00-S1		
3a. Address 600 TRAVIS STREET SUITE 5100 HOUSTON, TX 77002			one No (include area code) 81-840-4272		10. Field and Pool, or Exploratory GRAYBURG		
4 Location of Well (Footage, Sec. T, R, M., or Survey Description)					11. County or Parish, an	d State	
Sec 7 T17S R31E NENW 640FNL 2050FWL 🔑					EDDY COUNTY, NM		
ULC							
12. CHECK APPI	ROPRIATE BOX(ES) TO	O INDICATE	NATURE OF N	NOTICE, RI	EPORT, OR OTHER	DATA	
TYPE OF SUBMISSION TYPE OF ACTION						-	
Notice of Intent	Acidize De		epen Product		ion (Start/Resume) Water Shut-Off		
Notice of Intent	Alter Casing		cture Treat Reclam		ation Well Integrity		
Subsequent Report	☐ Casing Repair	□ New	w Construction Recom		lete	Other Workover Operations	
Final Abandonment Notice	Change Plans		g and Abandon	Temporarily Abandon		Workover Operations	
i	Convert to Injection		ıg Back ☐ Water I		rsposal		
determined that the site is ready for f DUE TO THE FAILED MIT ON THE FOLLOWING OPERATION RUWSU. FLOWED BACK 70 RU FLOOR & TONGS. TOOK START W/S PU 37 JTS & FLOOK 64 JTS FOR TOTAL OF 101, FILL. TOOH W/ 101 JTS & S 3-1/2 DC, XO, TIH W/ 88 JTS SWIVEL BREAK CIRC STAR & DC. RLS REV UNIT. BLEE	N THIS WELL, LINN ATTI ONS WERE CONDUCTE OO BBLS. TBG PRESSUF H 2/ 89 JTS 2-3/8 PLASTI OORHAND UNLATCHED TAGGED FISH AND SCF CRAPPER, NO DAMAGE	D: RE 1600 PSI. IC COATED 1 ELEVATOR: REWED BAC E. LD SCRAF	FLOWED WEL BG. LD PKR. I S BEFORE SLIP K INTO IT. FILL PPER. SPOT IN	L ALL NIGH PU 5-1/2 SC 'S WERE SE @ 3127', C DC PU 4-3/	Accepted NM T. NDWH, NUBOP, RAPPER W/ 4-3/4, ET & LOST TBG IN HI IBP @ 3527', 400' TO 4" BIT & BIT SUB, 6	ocp (13/1) RLS PKR 9/13/1\	
14. Thereby certify that the foregoing is	true and correct COI	VDITION	S OF APP	ROVAI	System	\(\frac{1}{2}\)	
Con	For LINN OPERA nmitted to AFMSS for proce	TING INCORP essing by KUI	ORATED, sent to	the Carlsbac 8/01/2011 (1	1 1KMS2202S€)•		
Name(Printed/Typed) TERRY B CALLAHAN			Title REGUL	ATORY SPE	CIALIST III	12 1 K	
Signature (Electronic Submission)			W/7 JTS FOR TOTAL 95 TAG @ 3127'. PU JTS. CIRC HOLE CLEAN, LD SWIVEL. TOOH, LD TBG ET 1 PKR W/ 1.50 PROFILE NIPPLE & T2 ON/OFF CHED FOR S OF A PPROVAT By the BLM Well Information System DRATED, sent to the Carlsbad TSIMMONS on 08/01/2011 (11KMS2202SE) Title REGULATORY SPECIALIST III Date 07/28/2011 L OR STATE OFFICE USE				
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE US	SE	V/A/	
Approved By ACCEPTED			DUNCAN	WHITLOCK	NGINEERING TECH	Date 08/20/2011	
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 Carlsbac	d			

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.

Additional data for EC transaction #114107 that would not fit on the form

32. Additional remarks, continued

TOOL. RU TBG TESTER, TIH W/ 90 JTS TESTING 2-3/8 IPC TO 5000 PSI, GOOD. RD TBG TESTER, RD FLOOR & TONGS, NDBOP. CIRC 55 BBLS PKR FLUID SET PKR @ 2815'. SWI. BLED DOWN WELL. NDWH, NUBOP, RLS PKR TOOH W/90 JTS LD PKR. PU 5-1/2 RBP & PKR. PU 89 JTS SET RBP @ 2791. PRESSURE TEST DIDN'T HOLD. RLS MOVE UP HOLE SET @ 2760 PRESSURE TEST RBP TO 740 PSI, GOOD. TOOH LD HD PKR. PU AD 1 PKR, TIH W/ 44 JTS SET @ 1377'. TEST DOWN CSG HAD LEAK PUMPING INTO IT @ 200 PSI. COME UP W/ MULTIPLE SETTINGS, ISOLATED CSG LEAK @ 508' TO 570'. RLS PKR TOOH LD AD 1 PKR. OPEN UP WELL. TIH W/ 19 JTS EOT @ 600. RU PAR 5 CEMENTER'S TEST LINES, GOOD. ESTABLISH RATE 2 BPM @ 500 PSI AND WELL WENT ON VACUUM, HAD TO CHANGE CEMENT PROCESS. LOAD HOLE W/ F/2 MIX & PUMP 24 BBLS CLASS C NEAT CEMENT W/ 2.35 CALCIUM 15.0 SLURRY, 1.32 YLD TBG PRSSURE 800 PSI. PUMP 1/2 BBLS F/W LEAVING 2 BBLS CMT IN TBG SO WE WOULD HAVE TO CLOSE TO 100' ABOVE TOP OF LEAK. PRESSURE WENT TO ZERO IN 5 MINS. TOOH W/ 19 JTS PULLING SLOW SO CEMENT WOULD FALL OUT OF TBG. SWI BLIND RAMS PUMPED PRESSURE TO 500 PSI, DROPPED TO 400. BUMPED BACK UP TO 500 PSI SWI FRO 36 HRS. WOC. PU 4-3/4" BIT, 6 3-1/2 DC TIH W/ 8 JTS, TAG TOP OF CSG LEAK @ 508'. PU SWIVEL, BREAK CIRC, DRLD DOWN TOTAL OF 14 JTS FELL THRU CEMENT @ 626'. PU 2 MORE JTS, CHECK FOR STRINGERS TO 689'; CIRC HOLE CLEAN, LD SWIVEL; TEST CSG TO 600. BLED WELL TO FRAC. CIRC 50 BBLS/PKR FLUID, SET PKR PRESS UP TO 550 PSI ON CSG TO RUN CHART, DID NOT HOLD. UNSET PKR, POOH W/ TBG, LD PKR. MIRU WL TRK & RUN INTO 2760' AND SET CIBP. DUMPED 1 BAILER OF CMT ON TOP OF CIBP. RIH W/TBG OPEN ENDED. ND BOP FLANG UP WELL HEAD. RDMO.

LINN IS REQUESTING A 45 DAY EXTENSION TO EVALUATE THIS WELL FOR ANY UP-HOLE POTENTIAL PRIOR TO SUBMITTING FOR PLUG AND ABANDONMENT OF THIS WELLBORE.

Conditions of Approval: Wells with Packers*

Linn Operating, Inc. J L Keel A 017

August 04, 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.
 - e. 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.
 - f. 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.
 - g. 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