

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM 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.**

OCD Artesia

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other INJECTION		5. Lease Serial No NMNM98120
2. Name of Operator LINN OPERATING, INC.		6. If Indian, Allottee or Tribe Name
Contact: TERRY B CALLAHAN E-Mail: tcallahan@linnenergy.com		7. If Unit or CA/Agreement, Name and/or No. NMNM07103QA
3a. Address 600 TRAVIS STREET SUITE 5100 HOUSTON, TX 77002	3b. Phone No. (include area code) Ph: 281-840-4272	8. Well Name and No. SKELLY UNIT 079
4. Location of Well (Footage, Sec., T, R, M., or Survey Description) Sec 23 T17S R31E Mer NMP SESW 660FSL 1980FWL 32.814674 N Lat, 103.842430 W Lon		9. API Well No. 30-015-05369
		10. Field and Pool, or Exploratory GRAYBURG JACKSON;SR-Q-G-S
		11. County or Parish, and State EDDY COUNTY, NM

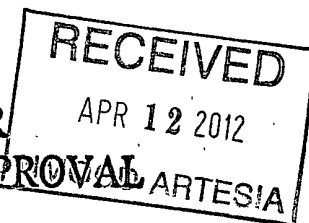
## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Workover Operations
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleat 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 recompleat 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.)

Description: Install 4" Flush Joint Liner from top perforation to surface.

Non Routine Equipment Needs:  
4?, 10.47#, L-80 Ultra Flush Joint ? Purchased  
Lift Nubbins and Stabbing Cup ? Rental  
4? Packer  
New Wellhead components for 4? Liner  
Casing Crew  
Cementing Services

SEE ATTACHED FOR  
CONDITIONS OF APPROVAL

Proposed Procedure:

Accepted for record  
NMOCD

TOS 4/13/2012

14. I hereby certify that the foregoing is true and correct Electronic Submission #134221 verified by the BLM Well Information System For LINN OPERATING, INC., sent to the Carlsbad Committed to AFMSS for processing by DEBORAH MCKINNEY on 03/29/2012 ()	
Name (Printed/Typed) TERRY B CALLAHAN	Title REGULATORY SPECIALIST III
Signature (Electronic Submission)	Date 03/29/2012
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By	Title
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	Date
APPROVED APR 6 2012 WESLEY W. INGRAM PETROLEUM ENGINEER	

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 \*\*

## Additional data for EC transaction #134221 that would not fit on the form

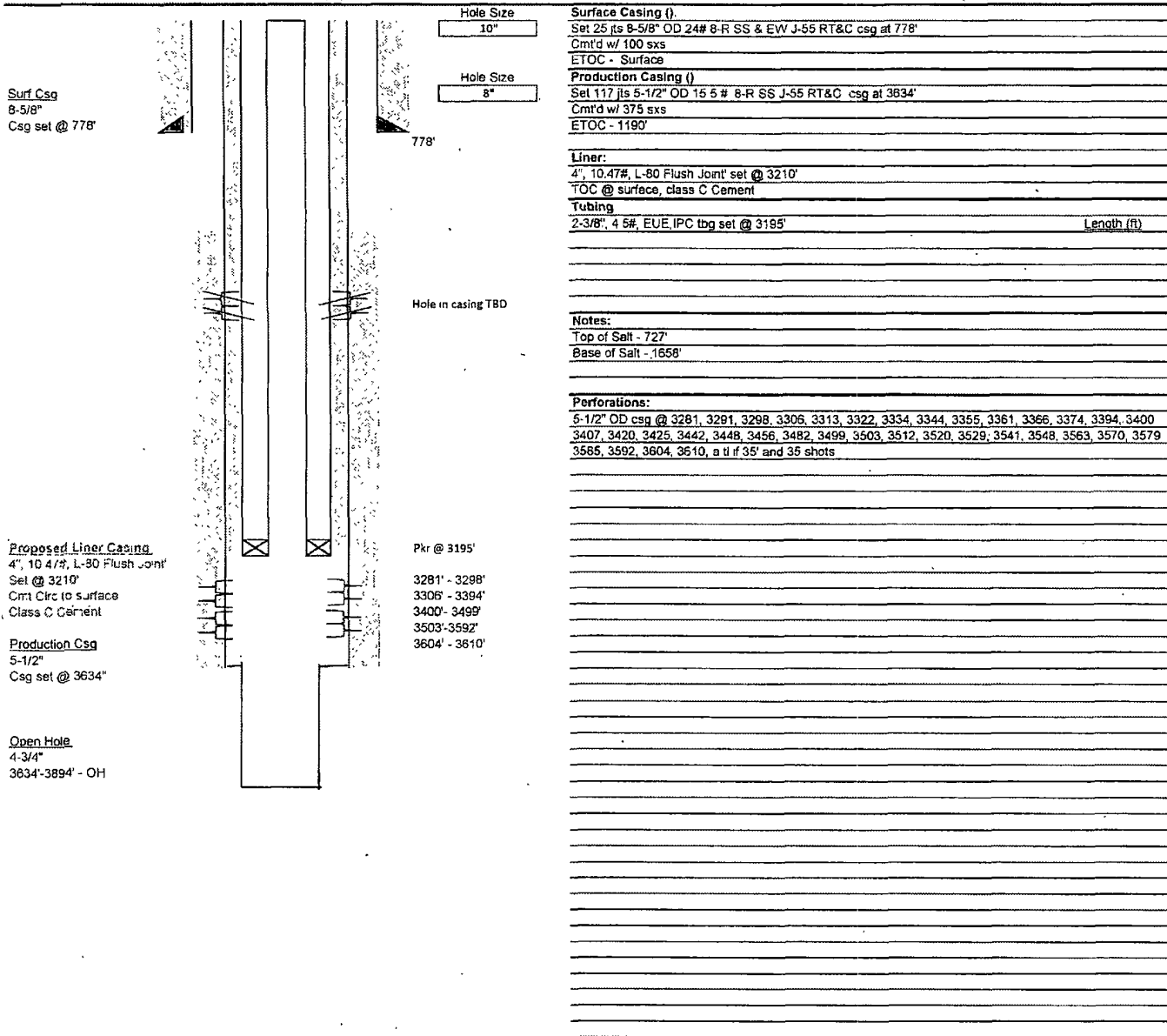
### 32. Additional remarks, continued

1. Test anchors prior to rigging up.
2. MIRU WO Rig and record casing and tubing pressure.
3. Bleed pressure off of well.
4. NU BOP.
5. Unseat packer and TOOH with tubing and packer.
6. RIH & set composite plug at 3227? with 10? cmt on top. TOOH with work string
7. TIH with packer and set 10? above cement plug and pressure test plug to 500 PSI.
8. Release packer and establish circulation with work string and brine fluid to load the hole.
9. TOOH with workstring and LD packer.
10. PU and TIH with 4?, 10.47#, L-80, Ultra Flush Joint Casing and lightly tag TOC @ 3215?.
11. After tagging TOC pull up 5? to set end of casing at 3,210?.
12. Establish circulation with brine fluid.
13. Rig up cement company.
14. Pump Class ?C? cement until circulation is obtained and then displace with wiper plug and brine water. Shut BH valve prior to bumping plug.
15. ND BOP
16. Set slips for 4? casing.
17. Install bowl for 2-3/8? tubing.
18. NU BOP.
19. WOC.
20. PU bit and workstring and drill out cement and composite plug.
21. Bleed well pressure down or kill well as necessary.
22. LD bit and Stand back workstring.
23. PU and RIH with workstring and packer.
24. Perform Acid Job
25. POOH and LD workstring and packer.
26. PU 1 jts of 2-3/8? IPC tail pipe, 4? injection packer (Arrowset with on off tool), 2-3/8? IPC injection tubing, and TIH with packer landed at 3195? (unset).
27. ND BOP.
28. Circulate packer fluid
29. Set packer at 3,195?.
30. NU WH.
31. Conduct mock MIT to 500 PSI.
32. Notify foreman that the well is ready for a witnessed MIT.
33. RDMO.

# Proposed Wellbore Schematic

Well Name: Skelly Unit # 79 (Prev Lea "B" 7) (Type: Injection)  
 Location: N-23-17S-31E 660 FSL 1980 FWL  
 API #: 30-015-05369  
 Elevations: GROUND 3858' (GR?)  
 DF. 3862'  
 Depths (KB): PBD. 3894'  
 TD: 3894'

Date Prepared: 2/21/2012 CB  
 Last Updated:  
 Spud Date: 3/4/1960  
 RR Date: 4/9/1960  
 Spud Date to RR Date:  
 Completion Start Date:  
 Completion End Date:  
 Completion Total Days:  
 Co-ordinates:



## Conditions of Approval

**Linn Operating, Inc.**

**Skelly Unit 079**

**API 3001505369**

April 6, 2012

1. Surface disturbance beyond the existing pad must have prior approval.
2. A closed loop system is required. The operator shall properly dispose of drilling contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
3. H<sub>2</sub>S monitoring equipment to be used on location and functional.
4. A 2000 (2M) BOPE 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.
5. 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.
6. **STEP 12: Establish circulation with at least 9lb/gal brine. Close the 4" x 5½" annulus at the surface and open the 5½" x 8½" annulus. Attempt to establish an injection rate and pressure into the 5½" casing leaks. Record that rate and pressure. Base the estimated necessary cement volume in STEP 14 on this rate and pressure.**
7. **Step 14: Pump a minimum of 150 sx Class "C" mixed at 14.8lb/gal, 1.32 ft³/sx, and 6.3gal/sx water. After cement circulation is obtained, close the 4" x 5½" annular and squeeze the 5½" casing with cement; attempting to obtain at least a 1,000 psig squeeze before the wiper plug seats. Determine the top of cement in the 4" x 5 ½" annulus. If not visible, run a temperature survey.**
8. 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.

### 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.

- 2) 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.
- 3) 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.
- 4) At least 24 hours before the test: In Eddy County email Paul R. Swartz [pswartz@blm.gov](mailto:pswartz@blm.gov), (phone 575-200-7902). If there is no response phone 575-361-2822. Note the contact notification method, time, & date in your subsequent report.
- 5) 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.
- 6) 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. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
- 7) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
- 8) 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.
- 9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 10) 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 the annular fluid level at any time.
- 11) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level is necessary to achieve this goal.
- 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 requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0 psia. Notify the BLM's authorized officer ("Paul R. Swartz" <[pswartz@blm.gov](mailto:pswartz@blm.gov)>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 15) 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 maintenance procedures) do not require a NOI, but a subsequent sundry needs to be filed.
- 16) 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 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. List (by date) descriptions of daily activity of any previously unreported wellbore workover.

**NM Fed Regs & Forms - [http://www.blm.gov/nm/st/en/prog/energy/oil\\_and\\_gas.html](http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html)**