OCD Artesia

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.
NMLC029419A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
8920002760

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

8. Well Name and No.
SKELLY UNIT 46

2. Name of Operator
LINN OPERATING INCORPORATED
Contact: TERRY B CALLAHAN
E-Mail: tcallahan@linnenergy.com

9. API Well No.
30-015-05357-00-D1

3a. Address
600 TRAVIS STREET SUITE 5100
HOUSTON, TX 77002

3b. Phone No. (include area code)
Ph: 281-840-4272

10. Field and Pool, or Exploratory
GRAYBURG

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 22 T17S R31E SENE 1980FNL 560FEL

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			
☒ 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 Workover Operations
	☐ 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.)

SKELLY 446 PROCEDURE - REPAIR LEAK AT SURFACE

1. Test rig anchors prior to rigging up.
2. MIRU. Check all pressures (tubing, casing, braden head)
3. Bleed off any pressure as necessary
4. NU BOP, POOH w/ everything. Stand back tubing. USE 2 -3/8? work string going forward
5. RUWL RIH w/ RBP and set @ 3000?
6. POOH, dump bail 10ft sand
7. Fill hole with fluid and ensure it stays full
8. RIH w/ pkr and set at 2230?
9. Squeeze perforations at 2301-2431. Monitor annulus constantly during squeeze. Have 400 sxs Class C neat cmt on location.

RECEIVED
APR 10 2013
NMOCD ARTESIA

1C Sy/14/2013
Accepted for record
NMOCD

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

Electronic Submission #188463 verified by the BLM Well Information System
For LINN OPERATING INCORPORATED, sent to the Carlsbad
Committed to AFMSS for processing by KURT SIMMONS on 01/24/2013 (13KMS4658SE)

Name *(Printed/Typed)* TERRY B CALLAHAN — Title REGULATORY SPECIALIST III

Signature (Electronic Submission) — Date 01/23/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JAMES A AMOS — Title SUPERVISOR EPS — Date 04/08/2013

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 Carlsbad

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional data for EC transaction #188463 that would not fit on the form

32. Additional remarks, continued

10. WOC 24hrs.
11. Test csg to 500# for 30 min
12. RUWL RIH perforate 4 0.42? holes @ 700?
13. POOH RDMO WL
14. RIH w/ PKR and set @ 500?
15. RU and pump fresh wtr in attempt to establish circulation up backside. (Pump no more than 100bbls at 2-4 bpm and below 1000psi)
16. Notify engr of circulation attempt results
17. Pump 200sxs Class C neat (14.8lb/gal, 1.33 yield
18. Displace w/ 2.5 bbls fresh wtr
19. Release PKR and reverse 15 bbls.
20. Let cmt set up for 24 hours.
21. Pressure up on well to 500# and hold for 30 min
22. Report results to engr
23. RIH w/ 3-7/8? bit, drill out cmt plugs
24. Test csg again to 500# for 30 min
25. Circulate out sand, POOH w/ RBP
26. RBIH w/ 3-7/8? bit to 3485?
27. RBIH w/ WS and perform acid job (look at past inj history and pressures from inj wk sheet)
28. RIH w/ profile nipple, inj pkr and on/off tool on IPC tubing and set at 3150?
29. Test backside to 500# for 30 min and report results to engr
30. RDMO
31. RTI

PROPOSED WELL DIAGRAM AND PROCEDURES ATTACHED.

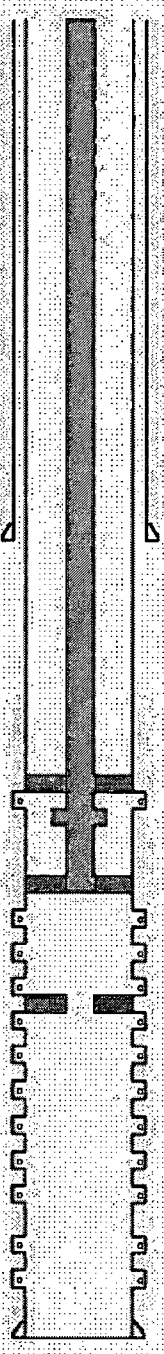
Well Name: **Skelly Unit # 46**

	Location:
County:	Eddy County
Surface Loc:	H-22-17S-31E 1980 FNL 560 FEL
Lat/Long:	32.821908176735? -103.850756062716
Field:	Grayburg
	Elevations:
GL:	3856'
KB:	3867'
KB-GL Calc:	11'

Logging Requirements:
PFC Log 2200' - 2500'
Wells Gamma- Collar Log (11/25/1961)

Date	History
11/16/1961	Spud well. Set 8 5/8" 24# 8-R EW J-55 csg set at 650' and cmt'd w/ 280 sacks.
11/22/1961	Reached TD @ 3820'. Set 4 1/2" 11.6# 8-R ST J-55OD casing @ 3820' and cmt'd w/ 400 sxs. PBTD 3813'. Perf'd 4 1/2" OD csg 3782' - 90' & 3799' - 3808' - ttl 68 holes. Treat'd perfs 3782' - 3808' w/ 1259 bbls lease oil, 50,000# 20/40 sand & 1000 gals 15% reg acid. Swabbed and tested well
	Perf'd 4 1/2" OD casing 3509' -14', 3518' - 22', 3525 - 36', 3544' - 53', 3574' - 78', 3612' - 16' (37' - ttl of 148 holes). Treat'd 3509' - 3616' w/ 1534 bbls "slick oil", 50,000# 20/40 sand and 1750 gals 15% reg acid w/ 90BS.
	Oil well test 543 BO, 0 BW in 24 hours, 1" choke
4/15/1965	Started injecting wtr into San Andres Formation through 4 1/2" OD csg perfs 3509' - 3808'
5/15/1967	Perf'd 4 1/2" OD csg w/ 2 SPF @ 3202', 3207', 3228', 3271', 3287', 3304', 3311', 3320' 3327', 3341', 3384', 3399', 3410', 3416', 3446', 3458', 3485' - ttl 17 holes. Treat'd through perfs 3202' - 3485' w/2000 gals 15% reg acid & 24 BS. Treat'd csg 3202' - 3485' w/ 25,000 gals wtr, 20,000# 20/40 sand & 8 BS
3/26/1968	Completed as single injection, 3202'-3808'
1/29/1979	Ran PFC log 2200' - 2500'. Perf'd Fren 7 Rivers, 1 SPF, 2301', 04', 07', 12', 14', 16', 25', 29', 32', 42', 46', 48', 54', 60', 62', 65', 67', 78', 82', 2418', 20', 28', & 31' - ttl 23 holes. Treat'd w/ 3500 gals 15% NE HCL and 35 BS. Ran long string, Howco R-3 Pkr, 27 jts 2 3/8" tbg 840', Otis Dual 4 1/2" Pkr, 70 jts 1.66 CS Hydril tbg, 2224' set at 3080', tension pkr at 3078', dual pkr 2239'. Ran short string 74jts 1.66CS Hydrilltubing 2219' set in dual pkr at 2219'
2/25/2002	RIH and tag fill @ 3365' Wash to 3500' Tag Pkr & cut it out. Wash to 3691. Circ hole clean
2/26/2002	RIH w/ 4 1/2" CIBP. Could not get past 3512'. POH did not set CIBP. Perf'd Grayburg 3269', 71', 3310', 12', 27', 41', 84', 85', 3399', 3402', 3408', 3419', 3446', 3448', 3458', 3485', 3487'. RIH w/ 2 3/8"x 4-1/2" R-4 pkr, 25 jts 2 3/8"x 4-1/2" tandom tension pkr &71 jts 2 3/8" IPC tubing. Set bottom pkr @ 3055' & top pkr @ 2236' - circulated 90 bbls pkr fluid. Test csg annulus to 500# for 30 min
2/27/2002	Place well back on inj 300BWPD @ 1400#
4/27/2012	Passed MIT. Pressured up to 500# 30 minutes

Current Wellbore Diagram



Well Name:	Skelly Unit # 46
Well Type:	Injection
Lease Type:	Federal
API No:	30-015-05357
Spud Date:	11/16/1961
Current Operator:	LINN Operating, Inc.
WBD Update:	8/6/1981 C. Burrell

Hole Size:	11"
Surface Casing:	8 5/8" 24# J-55 set @ 650'
Cement Blend:	
	280 sxs
Returns:	Surface
TOC:	

Hole Size:	N/A
Intermed ate	
Casing:	
Cement Blend:	
Returns:	
TOC:	

Details of Perforations

2/26/2002	3269', 71', 3310', 12', 27', 41', 84', 85', 3399', 3402', 3408', 3419', 3445', 3448', 3458', 3485', 3487'
1/29/1979	1 SPF, 2301', 04', 07', 12', 14', 16', 25', 29', 32', 42', 46', 48', 54', 60', 62', 65', 67', 78', 82', 2418', 20', 28', & 31' - ttl 23 holes
5/15/1967	3202', 3207', 3228', 3271', 3287', 3304', 3311', 3320' 3327', 3341', 3384', 3399', 3410', 3416', 3446', 3458', 3485'
11/22/1961	3509' - 3514', 3518' - 3522', 3525' - 3536', 3544' - 3553', 3574' - 3578', 3612' - 3616', 3637'
11/22/1961	3782' - 3790', 3799' - 3808' (68 holes)

Tubing Detail	
Joints	Description

Rod Detail (top to bottom)	
Rods	Description

Pumping Unit:

Hole Size:	5 5/8"
Production Casing:	4 1/2" 11.6# J-55 set @ 3820'
Capacity (bbl/ft):	
Cement Blend:	400 sxs
Returns:	TOC 1706' (Temp Survey)
Lead:	
Tail	

Top Grayburg 3124'
Top San Andres 3492'

Skelly 46 Procedure – Repair leak at surface (Briklynd Briggs 11/2/12)

1. Test rig anchors prior to rigging up.
2. MIRU. Check all pressures (tubing, casing, braden head)
3. Bleed off any pressure as necessary
4. NU BOP, POOH w/ everything. Stand back tubing. USE 2 -3/8' work string going forward
5. RUWL RIH w/ RBP and set @ 3000'
6. POOH, dump bail 10ft sand
7. Fill hole with fluid and ensure it stays full
8. RIH w/ pkr and set at 2230'
9. Squeeze perforations at 2301-2431. Monitor annulus constantly during squeeze. Have 400 sxs Class C neat cmt on location.
10. WOC 24hrs.
11. Test csg to 500# for 30 min
12. RUWL RIH perforate 4 0.42" holes @ 700'
13. POOH RDMO WL
14. RIH w/ PKR and set @ 500'
15. RU and pump fresh wtr in attempt to establish circulation up backside. (Pump no more than 100bbls at 2-4 bpm and below 1000psi)
16. Notify engr of circulation attempt results
17. Pump 200sxs Class C neat (14.8lb/gal, 1.33 yield
18. Displace w/ 2.5 bbls fresh wtr
19. Release PKR and reverse 15 bbls.
20. Let cmt set up for 24 hours.
21. Pressure up on well to 500# and hold for 30 min
22. **Report results to engr**
23. RIH w/ 3-7/8" bit, drill out cmt plugs
24. Test csg again to 500# for 30 min
25. Circulate out sand, POOH w/ RBP
26. RBIH w/ 3-7/8" bit to 3485'
27. RBIH w/ WS and perform acid job (look at past inj history and pressures from inj wk sheet)
28. RIH w/ profile nipple, inj pkr and on/off tool on IPC tubing and set at 3150'
29. Test backside to 500# for 30 min and report results to engr
30. RDMO
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