Form 3160-5 (March 2012)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

OCD Artesia

FORM APPROVED OMB No. 1004-0137 Expires October 31, 2014

5. Lease Serial No NM-17103

6. If Indian, Allottee or Tribe Name

		to drill or to re-enter ai APD) for such proposa			
SUBMI	T IN TRIPLICATE – Othe	7. If Unit of CA/Agreement, Name and	7. If Unit of CA/Agreement, Name and/or No.		
1. Type of Well					
✓ Oil Well Gas Well Other			8. Well Name and No. Lee Federal 004y		
Name of Operator     Strata Production Company	· · · · · · · · · · · · · · · · · · ·	9. API Well No. 30-015-24889	9. API Well No. 30-015-24889		
3a. Address		3b Phone No. (include area co	ode) 10. Field and Pool or Exploratory Area	10. Field and Pool or Exploratory Area	
P O Box 1030, Roswell, NM 88202-1030		575-622-1127	Scanlon Delaware	Scanlon Delaware	
4 Location of Well (Footage, Sec., T.,R.,M., or Survey Description)			11. County or Parish, State	11. County or Parish, State	
2100' FSL & 330' FWL, S25-T20S-R28E			Eddy County, New Mexico	Eddy County, New Mexico	
12. CHEC	CK THE APPROPRIATE B	OX(ES) TO INDICATE NATUR	E OF NOTICE, REPORT OR OTHER DATA	-	
TYPE OF SUBMISSION	TYPE OF ACTION				
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Production (Start/Resume) Water Sh Reclamation Well Inte		
Subsequent Report	Casing Repair  Change Plans	New Construction Plug and Abandon	Recomplete Other Other		
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal		
the proposal is to deepen direction Attach the Bond under which the v following completion of the involve	ally or recomplete horizonta work will be performed or proved operations. If the operat Abandonment Notices must	ally, give subsurface locations and rovide the Bond No. on file with l cion results in a multiple completi	od starting date of any proposed work and approximat measured and true vertical depths of all pertinent mat BLM/BIA. Required subsequent reports must be file on or recompletion in a new interval, a Form 3160-4 tts, including reclamation, have been completed and the start of the	arkers and zones. d within 30 days must be filed once	
Attachment.					
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See attached "Written Order

Accepted for record

NOTE

ACCEPTED TO 10/16/12

RECEIVED

OCT 16 2012

NMOCD ARTESIA

		TITIESIA
14 I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
Jennifer Zapata	tle Production Analyst	
Signature Junna Date De	ate 07/23/2012	ACCEPTED FOR RECORD
THIS SPACE FOR FEDERA	AL OR STATE OFFIC	EUSE
Approved by	Title	OC 1 2 2012
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certii		Date
that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		WESLEY W. INGRAM PETROLEUM ENGINEER
	1 1 1 1 1 1 1	

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, ficutious or fraudulent statements or representations as to any matter within its jurisdiction

#### Lee Federal #4

Eddy County, New Mexico Burton Flats Frank Morgan Repair Holes In Casing Delaware - 5452'-5470', Bone Springs - 5586'-5608' 5.5" 15.5# csg at 6700' PBTD DV Tool @ 3995'

#### 6/1/2012

Move in T&C anchor truck. Pull test achors to all anchors to 15K. Had to replace one anchor. 6/2-3/2012 Shut Down for weekend.

# 6/4/2012

Rig down and move Aries well service rig #45 from Lee Fed #1. Move in and rig up rig 45 on Lee Fed #4-Y. Move in and rig up Select well services kill truck. Un-Hang unit head and lay down polish rod & liner. Work to un-set pump for 3 hours. Pump finally came loose. Pull out of hole with 219 - 3/4" rods and pump. Make up TIW valve on tubing and shut in. Secure well and shut down for night. 6/5/2012

# SITP-80 psi, SICP - 750 psi

Drive to location. Hold tailgate safety meeting. SIP - 100 psi. Bleed gas pressure down. Nipple down wellhead. Un seat TAC and nipple up 7 1/16" 3M Hyd BOP. Pull out of hole as follows: 160 joints 2 7/8" 6.5# J-55 EUE tubing, TAC, 10 joints 2 7/8" tubing, SN, 1 joint as Mud joint. Joint was full of sand and paraffin. Stood back all tubing in derrick. Secure well and shut down for night.

# 6/6/2012

Go in the hole with Baker Oil tools 5.5" RBP & Packer. Set RBP at 5,178'. Rig up pump and start tesing casing from 5,178' to 1,600'. Packer started leaking after numerous times of setting. Pull out of hole with packer. Secure well and shut down for night.

#### 06/07/2012

Drive to location. Hold tailgate safety meeting. Make up Baker oil tools Full bore 5.5" packer. GIH and place EOT at 5,100'. Rig up pump truck and circulate well with 160 barrels 2% KCL water. Pull up and start looking for holes in casing. Found leak from 4,430' to 4,461'. Pressured up on casing to 1,000 psi and shut down. Pressure on casing immediately dropped to zero within 30 seconds. Repeated 3 times with same result each time. Rig down and release pump truck. Stand by waiting for winch truck to arrive on location to move half pit from Lee Fed #1 location. While waiting well started flowing up 2 7/8" tubing at 40 GPM. Pick up swab and GIH. IFL - Surf. FFL - 4,420' (SN depth) Recovered 25 barrels load water. Total swab runs - 5. Lay down swab. Secure well and shut down for night.

# 06/08/2012

SITP - 80 psi, SICP - 0 psi Drive to location. Hold tailgate safety meeting. Bleed well pressure down into half pit Pick up swab and GIH. IFL - 400' from surface. FFL - 4,420' (SN depth). Make 4 swab runs recovering 20 barrels formation water. Release packer and GIH to 4,461'. MIRU Elite well services acid equipment. Break circulation with 2% KCL and spot 1 barrel 15% HCL from 4,461'-4,430'. POOH and lay down 3 joints 2 7/8" tubing placing packer at 4,365'. Pressure test treating lines to 4,000 psi. OK. Release pressure and open well head. Pressure up to 3,000 psi and shut down to let pressure drop. Pressure fell to 2,000 psi in 1 minute. Repeated this process 6 times. Increase pressure to 3,600 psi.and let pressure drop. Pressure fell to 2,000 psi in 1 1/2 minute Repeated this processs 6 times. Able to establish injection rate of 2/10 BPM- 3,460 psi. Shut down and open bypass on packer.

Break circulation and spot 1,000 gallons 15% HCL to within 1/2 barrel of packer. Shut down and close bypass on packer. Resume rate at 2/10 BPM 3,460 psi. Once acid entered hole in casing increased rate up to 1.7 BPM - 2,600 psi. Increased rate to 2.0 BPM - 3,360 psi increased rate up to 2.6 BPM -3,407 psi. Hold rate and over flush by 15 barrels. ISIP - 881 psi, 5 - minute - 857 psi, 10 minute - 843 psi, 15 minute - 800 psi. Rig down and release Elite acid crew and open well to half pit. To at I load 69 barrels Let well flow back for 2 hours recovering 22 barrels load water. Pick up swab and GIH Made 4 swab runs recovering 12 barrels load water. FFL at seating nipple. Release packer and go in the hole with 4 joints 2 7/8" tubing. EOT at 4,489'. Dump 150#'s sand down tubing and chase to EOT with 20 barels 2% KCL water. Rig down and release pump truck. Let sand fall for 10 minutes. Pull out of hole and stand back 4 joints 2 7/8" tubing back in derrick. Secure well and shut doen for weekend. Plan to squeeze on Monday 6-11-12

# 06/11/2012

SIP - 40 psi Drive to location. Hold tailgate saefty meeting. MIRU Rising Star services cementing equipment. Hold pre job safety meeting and pressure test treating lines. Place cementing retainer at 4,325'. Squeeze from 4,430'-4,461'. Cement with 100 sacks class "C" with 3/10% C-25 & .25% R-38. Weight 14.8 ppg Yld - 1.33 gal/sk 6.30 Load tubing and sting into retainer. Pressure up on annulus to 500 psi. Establish injection rate at 1 BPM-2,900 psi. Mix all 100 sacks and place in tubing. Shut down and wash up pump and lines. Resume pumping cement at 1 bpm-2,062 psi. on displacement. Squeeze 75 sacks into formation. Start hesitation of cement with last 25 sacks. Achieved 1230 psi squeeze. Sting out of retainer and reverse circulate tubing two times volume until good and clean. Rig down and release RSS cementers. POOH and stand back tubing in the derrick. Release Baker oil tools.

#### 06/12/2012

Move in and rig up WRH reverse unit and swivel. Move in pump truck and vacuum truck and jet cement out of half pit. Keep well shut in to let cement squeeze cure.

#### 06/13/2012

**SIP - 0 psi** Drive to location. Hold tailgate safety meeting. Make up and go in the hole with 4 3/4" skirted mill tooth reverse bit, bit sub 3 5/8" OD x 2 3/16" ID, 6 - 3 1/2" Drill collars 3 3/8" OD x 1 5/8" ID, XO 3 1/2" x 1 1/2" and 129 joints 2 7/8" 6.5# EUE tubing. Pick up 2.5" Bowen Power swivel and nipple up stripper head w/rubber. Tag cement at 4,323'. Break circulation with water and start drilling cement. Drilled through cement and tagged on cement retainer at 4,325'. Drill on cement retainer for 8 hours. Finally broke through and drilled cement 20' down to 4,350'. Pick up 5' and circulate well bore clean twice volume. Laydown swivel and make up TIW valve. Secure well and shut down for night.

# 06/14/2012

Drive to location. Hold tailgate safety meeting. POOH with 129 joints 2 7/8" tubing and stand back in derrick. Stand back 6 - 3 1/2" DC's. Break out 4 3/4" skirted mill tooth reverse bit. Found 1 skirt bent inwards preventing 1 cone from turning. Make up new 4 3/4" skirted mill tooth reverse bit. Go back in the hole with DC's and 129 joints of tubing. Replace stripper rubber. Pick up swivel and break circulation. Continue drilling cement. Fall through cement at 4,450' with 132 joints of tubing in the hole. Lay down swivel and continue in the hole. Tag sand on top of RBP at 5,155'. Wash sand down to RBP at 5,178' with 154 joints in the hole. POOH and stand back tubing in the derrick. Break out and laydown XO, 6 - 3 1/2" DC's, bit sub and 4 3/4" bit. Nipple down stripper head. Make up Baker Oil tools retrieving head and go back in the hole with 20 joints 2 7/8" tubing. Secure well and shut down for night.

#### 06/15/2012

Drive to location. Hold tailgate safety meeting. Go in the hole with remaining 140 joints 2 7/8" tubing. Rig up pump and circulate 2' of sand from the top of RBP at 5,178'. Wash down and latch onto RBP. Release RBP and POOH with 160 joints of tubing and stand back in derrick. Break out XO, retrieving head and RBP. Release Baker Oil tools. Make up BHA and run production tubing as follows from surface:

160 - Joints 2 7/8" 6.5# J-55 tubing - 5165.73

Baker TAC 5197.83 10 Joints 2 7/8" 6.5# J-55 tubing- 5494.39

Seat Nipple-5495.49 4'

perforated sub - 5499.59

1 Joint 2 7/8" 6.5# J-55 Tubing as mud joint- 5531.86

2 7/8" Bull Plug-5532.70

Nipple down 7 1/16" 5M hydraulic BOP and set TAC in 12K tension. Nipple up B1 wellhead flange. Prep to RIH with pump and rods. RIH as follws from surface: Polish Rod and Liner 219 - 3/4" rods 1 - 1' x 3/4" pony sub 1 - 2.5 x 1 1/4 x 22 RHBC pump Serial # SPC 144 Nipple up wellhead. Rig up pump to tubing. Load with 16 barrels 2% KCL water and pressure test to 500 psi. OK. Release pressure and long stroke pump. Tubing pressured up to 500 psi in 4 strokes. Release pressure. Space out pump 12" off bottom. Hang on unit head. Release all rental equipment. Rig down Aries rig #45.

# Written Order of the Authorized Officer

Strata Production Company Lee Federal – 04Y API 30-015-24889 T20S-R28E, Sec 25 October 12, 2012

Operator performed cement squeeze of casing without approval. Operator is required by §43 CFR 3162.3-2 to obtain approval prior to any casing repair.

- 1. Operator did not report a casing integrity test to verify that the cement squeeze from 4,430'-4,461' on 6/11/2012 was successful.
- 2. Operator has not submitted a completion report for the Delaware recompletion performed in 1984 and the additional perforations added in 1993. Operator should be reporting to an S2 completion or a C1/C2. Was the RBP installed in 1984 left in the hole or removed? Are the Bone Spring perforations isolated? Is the operator down hole commingling the Bone Spring and Delaware formations? Operator has not submitted a request for down hole commingling approval.
- 3. Operator shall submit a (Sundry Form 3160-5) notice of intent requesting approval for the following activities:
  - Perform a BLM PET witnessed (charted) casing integrity test of 500 psig from 5,240'. Pressure leakoff may require remediation prior to returning the well to production. Include a copy of the chart in the subsequent sundry.
  - Provide BLM with an electronic copy (Adobe Acrobat Document) of a cement bond log from 5,200' or below to top of cement. The CBL may be attached in an e-mail to pswartz@blm.gov.
  - Remove the retrievable bridge plug set on 7/16/1984 at 5,550' and replace it with a CIBP to be set at 5,565'. Dump bail cement on the CIBP and tag the top of cement at 5,480' or less. If operator is down hole commingling, submit a sundry notice requesting approval; include allocation percentages, oil gravity, gas BTU, etc.

# PRS/WWI 101212

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - <a href="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</a>

§ 43 CFR 3162.3-2 Subsequent Well Operations.

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

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