

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OCD-HOBBS

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM-01747
2. Name of Operator Samson Resources Company		6. If Indian, Allottee or Tribe Name
3a. Address 200 N. Loraine, Suite 1010, Midland, TX 79701	3b. Phone No. (include area code) (432) 683-7063	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 660' FSL & 990' FEL of Section 12-T20S-R34E		8. Well Name and No. Lea Federal Unit #19
		9. API Well No. 30-025-36905
		10. Field and Pool, or Exploratory Area Lea; Bone Spring
		11. County or Parish, State Lea, 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 checked="" type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<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 recompletion in a new well, 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 final site is ready for final inspection.)

1. Install and set PU and POC.
2. ND Tree. RU Completion Unit. NU BOP's.
3. TOH w/tubing and lay down same. RD Completion Unit.
4. RU e/l, mast truck lubricatr. RIH w/4.5" gauge ring to 12,740'. RIH w/10,000 psig CIBP and set @ 12,730'. Cap w/7 sx Class H mixed @ 16.4 ppg (cement volume double due to depth). WOC 48 hours.
5. RU Howco acid single and casing saver if necessary. Load casing w/2% KCl water and test to 8000 psig. Notify Midland if casing and plug do not test.
6. RU e/l, lubricator and mast truck. Perf Stg I (10,458'-10,464'). Breakdown perfs w/4% KCl water. After breakdown pump 50 bbls 4% KCl water at max rate (below Pmax). SI and monitor falloff pressures for 30 minutes. Perf Stage Ia,b (10,146'-10,152' & 10,336'-10,342').
7. Frac Bone Spring I perfs (10,146'-10,464') w/1800 gals 15% Ferchek SC and 217,818# of 20/40 PR-6000 in 81,797 gals. DeltaFrac. Flush, monitor and flow back.
8. RU Completion Unit. TIH w/ALE on 2.875", 6.50#, N80, EUE tubing.
9. ND BOP. RD Completion Unit. NU Tree. Pump test completed interval.
10. ND Tree. RU Completion Unit. NU BOP. TOH w/ALE. RD Completion Unit.

*****Procedure Continued on Attached Sheet*****

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) J. L. Farrell, III		Title District Engineer
Date 12/27/2006		<div style="border: 2px solid black; padding: 5px; text-align: center;"> APPROVED JAN 17 2007 WESLEY W. INGRAM PETROLEUM ENGINEER </div>
<div style="border: 1px solid black; padding: 5px;"> THIS SPACE FOR FEDERAL OR STATE OFFICE USE </div>		
Approved by 	Title	Office
<p>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.</p> <p>Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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.</p>		

Lea Federal Unit Well No. 19
12-T20S-R34E Lea Co., NM
Bone Spring Recompletion Procedure
Page -2- (Item 13 continued)

11. RU e/l, mast truck lubricator. RIH w/4 1/2", gauge ring to 10,130'. RIH w/10,000 psig Composite BP for 5 1/2", 20# casing and set @ 10,120'. **Note:** If the production test for the Stage I completion did not yield hydrocarbons and the decision has been made to abandon the zone, RIH w/10,000 psig CIBP for 5 1/2", 20# casing and set @ 10,120'. Cap w/7 sx Class 'H' mixed @ 16.4 ppg (cement volume double due to depth). WOC 48 hours. This will change the maximum allowable pressure on stage II to 8,000 psig.
12. RU Howco acid single or kill truck. Load casing w/4% KCl water and test same to 6000 psig (8000 psig if Stage I was abandoned). Notify Midland if casing and plug do not test.
13. RU e/l, lubricator and mast truck. Perforate Stage II (9,710' - 9,716'; 9,732' - 9,738' & 9,785' - 9,791') using a 3 3/8", 25.0 gm, 0.42" EHD, 47.36" Titan casing gun configured 2 SPF and 0 degree phasing.
14. Frac Bone Spring II perfs (9,710' - 9,791') with 1500 gallons of 15% Ferchek SC and 108,811 #'s of 20/40 PR-6000 in 41,457 gals of DeltaFrac 200 R (16). Flush w/8,500 gallons of WaterFrac GR (5) as per attached Sierra schedule. Pmax: 6000 or 8000 psig depending upon plug setting. Rate: 50 bpm. After flush, monitor and record SIP for 30 minutes.
15. RU e/l, lubricator and mast truck. RIH w/4 1/2", gauge ring to 9,680'. RIH w/10,000 psig Composite Frac Plug for 5 1/2", 20# casing and set @ 9,670'. Tie onto casing and test plug to 6000 psig. Perforate Stage III (9,511' - 9,517'; 9,548' - 9,554' & 9,589' - 9,595') using a 3 3/8", 25.0 gm, 0.42" EHD, 47.36" Titan casing gun configured 2 SPF and 0 degree phasing.
16. Frac Bone Spring III perfs (9,511' - 9,595') with 1500 gallons of 15% Ferchek SC and 121,820 #'s of 20/40 PR-6000 in 49,574 gals of DeltaFrac 200 R (16). Flush w/8,350 gallons of 4% KCl water as per attached Sierra schedule. Pmax: 6000. Rate: 50 bpm. After flush, monitor and record SIP for 30 minutes.
17. Flow back back well for clean-up.
18. RU Completion Unit, power swivel and reverse unit. TIH w/4 1/2" bit and 4 - 3 1/8" DC's on 2 7/8", 6.50#, N80, EUE tubing. Drill out plugs @ 9670' and 10,120'. Clean out to PBTD @ 12,700'. **Note:** Do not drill out plug @ 10,120' if the Stage I completion was abandoned. TOH w/BHA
19. TIH w/ALE on 2 7/8", 6.50#, N80, EUE tubing.
20. ND BOP, RD completion rig. NU Wellhead, place on pump and monitor production.

DISTRICT I
1005 N. FRENCH DR., MOORE, NM 88240

DISTRICT II
1501 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-36905	Pool Code 37570	Pool Name Lea; Bone Spring
Property Code	Property Name LEA FEDERAL	Well Number 19
OGRID No. 20165	Operator Name SAMSON RESOURCES	Elevation 3669'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	20-S	34-E		660'	SOUTH	990'	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 80	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature R. M. Burditt Printed Name Sr. Engineer Tech. Title 12/27/2006 Date
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. JUNE 21, 2004 Date Surveyed Signature Professional Surveyor NEW MEXICO 041107642 Certificate No. GARY EASON 12641